COSTUME CULTURE:

A TRAVELING EXHIBITION SYSTEM FOR THE COSTUME MUSEUM OF CANADA

BY DENIZ OZGE AYTAC

A Practicum Submitted to the
Faculty of Graduate Studies of The University of Manitoba
in Partial fulfillment of the requirements of the degree of

MASTER OF INTERIOR DESIGN

Department of Interior Design
Faculty of Architecture
University of Manitoba

Copyright© 2014 by Deniz Ozge Aytac

Kanada Kostüm Müzesi (CMC) Kanada' da kendi türündeki müzelerin ilkini oluşturmaktadır. Müze, Kanada giyim ve tekstil eserlerinin bir araya getirildiği, muhafaza edildiği, ve sergilendiği kapsamlı bir kaynak olarak calışmaktadır. Gezici sergiler geniş bir kitleye eserlerin sergilenmesi bakımından Kostüm Müzesi (CMC) icin önem teşkil etmektedir. Fakat müzenin finansal kaynaklarının sınırlılığı, Kostüm Müzesi (CMC)' nin gezici müzeyi finanse etmesine sınırlama getirmiştir. Bu tez Kostüm Müzesi (CMC)' nin gezici sergisini sahneleyebilmesi icin gerekli bir yapı isteğini, Gezici Sergi Sistemi (TES) ni tasarlayarak ele almaktadır. Ayrıca, kültürel iletişim, anlatıbilim, ve mizansen konseptleri de araştırılmiştır.Gezici Sergi Sistemi (TES) ile Kostüm Müzesi (CMC)' nin kapsamlı giyim ve aksesuar kolleksiyonu uygun maliyetli ve sürdürülebilir tasarımıyla Kanada' nın kültürel eğitimine destek olacaktır. Gezici Sergi Sistemi (TES) mevcut bina ve mekanlarda kurulabilen bir sergi sistemidir. Bu proje Kostüm Müzesi (CMC)' ne gelir sağlama ve Kanada moda kültürü ile tarihinin yerel ve ulusal yayılımına olanak sağlayamayı önermektedir.

ABSTRACT

The Costume Museum of Canada (CMC) is the first of its kind in Canada. It works as a comprehensive repository where Canadian clothing and textile artifacts are collected, preserved, and presented. Traveling exhibits are important to the CMC to present the collection to a wider audience; however, the CMC's financial limitations restrict how they can support traveling exhibitions. This practicum project addresses the desire of the museum for a facility to stage traveling exhibits by the design of a Traveling Exhibition System (TES) for the CMC. The practicum explores the concepts of cultural communication, narratology and mise-en-scene. It will facilitate Canadian cultural education through the exhibition of CMC's vast collection of costumes and related accessories in a cost effective and sustainable manner. TES will be an exhibit system that can be set up within existing buildings and spaces. The project offers the possibility for the CMC to generate revenue and to facilitate dissemination of Canadian fashion culture and history regionally and nationally.

ACKNOWLEDGEMENTS

I would like to thank my practicum committee Lynn Chalmers (supervisor), Dr. Shauna Mallory-Hill (internal advisor), and Stephanie Middagh (external advisor) for their expertise, support, and guidance through the project. To my supervisor Lynn Chalmers, thank you for your constant encouragement, patience, and significant feedback during this seemingly endless process. Your mentorship has meant a lot to me. To Tijen Roshko, thank you for your guidance and support during the program. Your positivity and sense of humor has made me to look at life from a different perspective. To Prof. Lancelot Coar and Adrien Sparling, thank you very much for providing your valuable knowledge and time on my project.

To my thoughtful classmates, thank you for your understanding, assistance and compassion during my time in the program. A special thanks to my Winnipeg family Sharon, Bob, Serpil, Pervin, Sepide, Ying, and Arthur for always being there for me. Your emotional support filled my family's absence.
Finally, I would like to thank my mom and dad for their unwavering love and support through the duration of my studies.

Canım Anneciğim ve Babacığım'a
(To my beloved mom and dad)

Abstract ii
Acknowledgements iv
List of Figures vii
List of Tables xvi

CHAPTER 1 INTRODUCTION 1

1.1 Project Description and Justification 3
1.2 Design Objectives 17
1.3 Methodology 19
1.4 Client: The CMC 21

CHAPTER 2 LITERATURE REVIEW 25

2.1 Artifacts speak to us: A Cultural Mode of Communication 27
Defining Culture 27
Cloth and Dress in Cultural Context 31
Cloth and Dress in Exhibit Studies 33
2.2 Dresses tell narratives: Narratology Explored 35
Defining Narratology 35
Narratology and Exhibit Studies 37
Narrated Spaces 38
2.3 Setting the stage for the costumes: Mise-en-scène 39
Defining Mise-en-scène 39
Mise-en-scène in Theatrical Space 40
Mise-en-scène in Spatial Design 41
2.4 Synthesis of Literature Review 43

CHAPTER 3 PRECEDENT STUDIES 45

3.1 Villa Moda, Bahrain, United Arab Emirates 47
3.2 Their Day, Prague, Czech Republic 51
3.3 Zalando Pop-up Store, Berlin, Germany 59

CHAPTER 4 DESIGN PROGRAMMING 67

4.1 Project Goals and Project Definition 69
4.2 Site Analysis 71
Building Analysis 81
Exhibition Space Analysis 82
4.3 Client and User Profiles 83
4.4 Spatial Requirements for Manitoban Weddings 87
4.5 Spatial Planning 90
4.6 Display Requirements 95
4.7 Artifact Conservation Requirements 103

CHAPTER 5 CONCEPT INVESTIGATION 107

5.1 The CMC Volunteering Experience 109
5.2 Vintage Clothing Experience 111
5.3 Sewing Experiment 117
5.4 Folding Experiment 121

TABLE OF CONTENTS

APTER 6 DESIGN PROPOSAL 125

.1 Design Overview 127
.2 Exhibition Exterior 131
.3 Exhibition Interior 137
6.3.1 Exhibition Entrance 141
6.3.2 Ticket&Information Desk and Narrative Part 1 143
6.3.3 Narrative Part 2 145
6.3.4 Narrative Part 3 147
6.3.5 Hands-on Installation 149
6.3.6 Interactive Installation 151
6.3.7 Exhibition Exit 152
.4 Kit of Parts 153
6.4.1 Construction Drawings 155
6.4.2 Components of Post Set 157
6.6.3 Components of Truss Set 161
6.6.4 Components of Side Set 165
6.6.5 Steps of Setting Traveling Exhibition System (TES) 169
.5 Alternative Exhibition Layouts 173
6.5.1 "L" Type Layout 173
6.5.2 "T" Type Layout 175
6.5.3 "Narrow U" Type Layout 177
6.5.4 "Wide U" Type Layout 179
Exhibition Furniture 181
6.6.1 Display Boxes 183
Small
Medium
Large
6.6.2 Display Systems 187
Display System Type 1 187
Display System Type 2 188
6.6.3 Hands-on Desk and Nested Stools 189
6.6.4 Interactive Installation Mirror 191
6.6.5 Exhibition Banner 192
6.6.6 Ticket Desk 193
6.6.7 The CMC Logo 194
Conclusion 195

rences 197
endix A - Universal Design and Building Code Compliance 201
endix B - Material Selection 215
endix C - Technologicy and Equipment Selection 217
endix D - Construction Drawings 219
endix E - Additional Drawings 235

Figure 1. Dress detail from Costume Museum of Canada: Inside Out exhibit. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from

http://www.costumemuseumcanada.com/public/inside.html#

Figure 2. Jet Jewelry from Costume Museum of Canada: Who Needs White exhibit. Photograph by the Costum Museum of Canada. Permission obtained May 21th, 2013. Accessed from

http://www.costumemuseumcanada.com/public/womens.html

Figure 3. Maison Worth Dress from CMC collection. Photograph by the Costume Museum of Canada. Permiss obtained May 21th, 2013. Accessed from http://www.costumemuseumcanada.com/public/artifacts.html

Figure 4. Maison Worth Dress detail from CMC collection, close-up. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from

http://www.costumemuseumcanada.com/public/artifacts.html

Figure 5. English Wedding Dress from CMC collection. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from

http://www.costumemuseumcanada.com/public/artifacts.html#

Figure 6. English Wedding Dress from CMC collection, close-up. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from

http://www.costumemuseumcanada.com/public/artifacts.html#

Figure 7. Photographic study of display mannequin from Vintage in the Village. Photograph by the author. The material is photographed with permission from Jane Western. Permission obtained February 25th, 2013.

Figure 8. Photographic study of dress buttons from Antique Store. Photograph by the author. The material is photographed with permission from Carole Blyth. Permission obtained February 25th, 2013.

Figure 9. 109 Pacific Avenue gallery space. Photograph by Stephanie Middagh. Permission obtained March 11 2014. Photograph emailed to the author.

Figure 10. 109 Pacific Avenue gallery space. Photograph by Stephanie Middagh. Permission obtained March 11th, 2014. Photograph emailed to the author.

Figure 11. 109 Pacific Avenue gallery space. Photograph by Stephanie Middagh. Permission obtained March 11th, 2014. Photograph emailed to the author.

Figure 12. 109 Pacific Avenue gallery space. Photograph by Stephanie Middagh. Permission obtained March 11th, 2014. Photograph emailed to the author.

Figure 13. Photographic study of dress buttons from Antique Store. Photograph by the author. The material is photographed with permission from Carole Blyth. Permission obtained February 25th, 2013.

Figure 14. Who Needs White Exhibit: CMC gallery space on 109 Pacific Avenue. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from http://www.costumemuseumcanada.com/public/womens.html

Figure 15. Who Needs White Exhibit: CMC gallery space on 109 Pacific Avenue. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from http://www.costumemuseumcanada.com/public/womens.html

Figure 16. Grand Opening of CMC on 109 Pacific Avenue. Photograph by Stephanie Middagh. Permission obtained March 11th, 2014. Photograph emailed to the author.

LIST OF FIGURES

gure 17. Grand Opening of CMC on 109 Pacific Avenue. Photograph by Stephanie Middagh. Permission otained March 11th, 2014. Photograph emailed to the author.

gure 18. Actors and projections: A scene from Their Day theatre play. Photograph by Archives of the National eatre, Prague, Czech Republic. Permission obtained March 20th, 2013. Photograph emailed to the author.

gure 19. Their Day stage plan. Photograph by Jarka Burian. Permission obtained March 20th, 2013. Accessed m Jarka Burian, The scenography of Josef Svoboda (Middletown: Wesleyan University Press, 1971), 92.

gure 20. Projections are used to create the milieu: A scene from Their Day. Photograph by Jarka Burian. rmission obtained March 20th, 2013. Accessed from Jarka Burian, The scenography of Josef Svoboda iddletown: Wesleyan University Press, 1971), 94.

gure 21. Projections are used to create the milieu: A close up scene from Their Day. Photograph by Jarka rian. Permission obtained March 20th, 2013. Accessed from Jarka Burian, The scenography of Josef Svoboda iddletown: Wesleyan University Press, 1971), 94.

gure 22. Interaction of the little boy with the projections: Projections are used to create the milieu. Photograph Archives of the National Theatre, Prague, Czech Republic. Permission obtained March 20th, 2013. Photograph ailed to the author.

ure 23. Theatre props are tools to connect the actors to the milieu, time and the character. Photograph by chives of the National Theatre, Prague, Czech Republic. Permission obtained March 20th, 2013. Photograph ailed to the author.

ure 24. A mobile display unit from Zalando Pop-up Store. Photograph by Sigurd Larsen Architecture and sign. Permission obtained July 29th, 2013. Accessed from http://sigurdlarsen.eu/projects/pop-up-store-berlin/

ure 25. The neutral selection of materials makes the clothing line to stand out: A mobile display unit from ando Pop-up Store. Photograph by Sigurd Larsen Architecture and Design. Permission obtained July 29th, 3. Accessed from http://sigurdlarsen.eu/projects/pop-up-store-berlin/

ure 26. Store windows are closed by the white boxes. Photograph by Sigurd Larsen Architecture and Design. mission obtained July 29th, 2013. Accessed from http://sigurdlarsen.eu/projects/pop-up-store-berlin/

ure 27. Design and material selection of concrete stool resembles the rigidity of the space as well as eriality. Photograph by Sigurd Larsen Architecture and Design. Permission obtained July 29th, 2013. essed from http://sigurdlarsen.eu/projects/pop-up-store-berlin/

ure 28. Zalando Pop up store interior. Photograph by Sigurd Larsen Architecture and Design. Permission ained July 29th, 2013. Accessed from http://sigurdlarsen.eu/projects/pop-up-store-berlin/

ure 29. Polo Park Shopping Center main entrance on Portage Avenue. Photograph by the author.

ure 30. Neighbourhood and Landmark map. Image by the author.

ure 31. Circulation map. Image by the author.

ure 32. Transportation map. Image by the author.

ure 33. Density map. Image by the author.

ure 34. Bubble diagram selected option: offers 5 spaces. Figure by the author.

ure 35. Bubble diagram option 2, offers 5 spaces. Figure by the author.

ure 36. Bubble diagram option 3, offers 6 spaces. Figure by the author.

ure 37. Bubble diagram option 4, offers 6 spaces. Figure by the author.

Figure 38. Bubble diagram option 5, offers 7 spaces. Figure by the author.

Figure 39. Jewelry bust. Accessed on April12, 2014. For visual reference please go to:

http://www.mannequinmode.com/Elegant_Woman_Bust_DS-033.jpg

Figure 40. Hand display form. Accessed on April12, 2014. Accessed from

http://www.mannequinmode.com/Fiberglass_Display_Hands.gif

Figure 41. Acrylic paper stand. Accessed on April12, 2014. For visual reference please go to:

http://www.amazon.com/SourceOne-Slant-Clear-Acrylic-Holder/dp/B002YVGQHE

Figure 42. Jet Jewelry: Costume Museum of Canada's Who Needs White exhibit. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from

http://www.costumemuseumcanada.com/public/womens.html

Figure 43. Assorted purses: Circa 1910 to 1920, glass and cut steel beads, metal chain and filigree, straw with grosgrain ribbon and wood beads from Costume Museum of Canada's collection. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from

http://www.costumemuseumcanada.com/public/artifacts.html

Figure 44. English Table Napkin: Linen damask, circa 1570, 71.5 cm x 114 cm from Costume Museum of Canada's collection. One part of a household of Queen Elizabeth I and one of only 6 known authenticated napkins in the world, it is large so it could protect the elaborate beaded clothing of the time. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from

http://www.costumemuseumcanada.com/public/artifacts.html#

Figure 45. Acrylic hat stand. Accessed on April12, 2014. For visual reference please go to:

http://chdisplay.en.ec21.com/offer_detail/Sell_acrylic_hat_display_stand--8869924.html?gubun=S

Figure 46. Acrylic shoe stand. Accessed on April 12, 2014. For visual reference please go to:

http://dalco.en.alibaba.com/product/614561101-212737020/Acrylic_Single_Shoe_Display_Holder_Stand_Shelf.html

Figure 47. Hat: Costume Museum of Canada's Dirty Thirties exhibit. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from

http://www.costumemuseumcanada.com/public/hatgallery.html

Figure 48. Shoes: Costume Museum of Canada's Who Needs White exhibition. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from

http://www.costumemuseumcanada.com/public/womens.html

Figure 49. Acrylic male half (1/2) torso. Accessed on April 12, 2014. Accessed from

http://www.mannequinmode.com/Male_Dress_Form_Torso_with_chrome_base.jpg

Figure 50. Acrylic female half (1/2) torso. Accessed on April 12, 2014. Accessed from

http://www.mannequinmode.com/F14-16W-7-200x600Chrome.jpg

Figure 51. Acrylic female 3/4 torso. Accessed on April 12, 2014. Accessed from

http://www.mannequinmode.com/F14-16W-7-200x600Chrome.jpg

gure 52. Man's Waistcoat: Hand embroidered silk circa 1780 to 90, from Costume Museum of Canada's llection. Photograph by the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from tp://www.costumemuseumcanada.com/public/artifacts.html

gure 53. Half (1/2) corset: Costume Museum of Canada's Foundations exhibit. Photograph by the Costume useum of Canada. Permission obtained May 21th, 2013. Accessed from

tp://www.costumemuseumcanada.com/public/accessories.html

gure 54. 3/4 corset back view: Costume Museum of Canada's Foundations exhibit. Photograph by the Costume useum of Canada. Permission obtained May 21th, 2013. Accessed from

tp://www.costumemuseumcanada.com/public/accessories.html#

gure 55. Acrylic male 3/4 torso. Accessed on April12, 2014. Accessed from

tp://www.mannequinmode.com/Male_Dress_Form_Torso_with_chrome_base.jpg

gure 56. Acrylic female 3/4 torso. Accessed on April12, 2014. Accessed from

tp://www.mannequinmode.com/F14-16W-7-200x600Chrome.jpg

gure 57. 19th century nightshirts: Costume Museum of Canada's After Midnight exhibit. Photograph the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from http://www. stumemuseumcanada.com/public/mensclothing.html

gure 58. Dressing gowns: Costume Museum of Canada's After Midnight exhibit. Photograph by the Costume seum of Canada. Permission obtained May 21th, 2013. Accessed from http://www.costumemuseumcanada. m/public/mensclothing.html#

ure 59. Close up design emphasis of dress: Costume Museum of Canada's Dirty Thirties exhibit. Photograph the Costume Museum of Canada. Permission obtained May 21th, 2013. Accessed from http://www. stumemuseumcanada.com/public/hatgallery.html

ure 60. Unpacking: Process of removing the dress out of the box. Costume Museum of Canada's Wedding wns: from Victorian times to the Millennium exhibit 2012. Photograph by the author.

ure 61. Dress on mannequin: Costume Museum of Canada's Wedding gowns: from Victorian times to the ennium exhibit 2012. Photograph by the author.

ure 62. Buttons: Costume Museum of Canada's Wedding gowns: from Victorian times to the Millennium exhibit 2. Photograph by the author.

ure 63. Adjusting: Costume Museum of Canada's Wedding gowns: from Victorian times to the Millennium ibit 2012. Photograph by the author.

ure 64. Details: Buttoning up the cuffs. Costume Museum of Canada's Wedding gowns: from Victorian times he Millennium exhibit 2012. Photograph by the author.

ure 65. Putting on the coat: Costume Museum of Canada's Wedding gowns: from Victorian times to the ennium exhibit 2012. Photograph by the author.

ure 66. Wedding dress: Costume Museum of Canada's Wedding gowns: from Victorian times to the ennium exhibit 2012. Photograph by the author.

ure 67. Brocade dress 1: Photographic color study of vintage clothing item from Antique Store. Image by the hor.

ure 68. Brocade dress 2: Photographic color study of vintage clothing item from Antique Store. Image by the hor.

Figure 69. Velvet dress 1: Photographic color study of vintage clothing item from Antique Store. Image by the author.

Figure 70. Back fastening: Photographic color study of vintage clothing item from Antique Store. Image by the author.

Figure 71. Coat button detail: Photographic color study of vintage clothing item from Antique Store. Image by t author.

Figure 72. Brocade dress 3: Photographic color study of vintage clothing item from Antique Store. Image by th author.

Figure 73. Buttons: Photographic study of fastening methods of vintage clothing item from Antique Store. Imag by the author.

Figure 74. Hook: Photographic study of fastening methods of vintage clothing item from Antique Store. Image the author.

Figure 75. Safety Pin: Photographic study of fastening methods of vintage clothing item from Antique Store. Image by the author.

Figure 76. Pleating and stitching: Photographic study of fastening methods of vintage clothing item from Antiqu Store. Image by the author.

Figure 77. Ribbon ties: Photographic study of fastening methods of vintage clothing item from Antique Store. Image by the author.

Figure 78. Decorative ties: Photographic study of fastening methods of vintage clothing item from Antique Store Image by the author.

Figure 79. Embroidery: Photographic study of fastening methods of vintage clothing item from Antique Store. Image by the author.

Figure 80. Closed weave: Photographic study of vintage fabric texture from Antique Store. Image by the author.

Figure 81. Open weave: Photographic study of vintage fabric texture from Antique Store. Image by the author.

Figure 82. Transparent fabric: Photographic study of vintage fabric texture from Antique Store. Image by the author.

Figure 83. Open weave: Photographic study of vintage fabric texture from Antique Store. Image by the author.

Figure 84. Sleeve detail: Photographic study of vintage fabric texture from Antique Store. Image by the author.

Figure 85. Sleeve detail: Photographic study of vintage fabric texture from Antique Store. Image by the author.

Figure 86. Open weave: Photographic study of vintage fabric texture from Antique Store. Image by the author.

Figure 87. Sewing needle: The process of hand sewing experiment. Photograph by the author.

Figure 88. Hand sewing: The process of hand sewing experiment. Photograph by the author.

Figure 89. Stitched puffed fabric: The process of hand sewing experiment. Photograph by the author.

Figure 90. Running stitching: the process of hand sewing experiment. Photograph by the author.

Figure 91. Basting stitching: The process of hand sewing experiment. Photograph by the author.

Figure 92. Straight stitch: Center needle position, machine sewing experiment. Photograph by the author.

Figure 93. Flatlock stitch: Machine sewing experiment. Photograph by the author.

gure 94. Three step zigzag stitch: Machine sewing experiment. Photograph by the author.
gure 95. Pleated fabric: Machine sewing experiment. Photograph by the author.
gure 96. Flatlock stitch close up: Machine sewing experiment. Photograph by the author.
gure 97. Flatlock stitch: Machine sewing experiment. Photograph by the author.
gure 98. Blanket stitch: Machine sewing experiment. Photograph by the author.
gure 99. Slip stitch: Machine sewing experiment. Photograph by the author.
gure 100. Sewing machine 1: Machine sewing experiment. Photograph by the author.
gure 101. Sewing machine 2: Machine sewing experiment. Photograph by the author.
gure 102. Folding experiment 1 - black - side view: Black foam core and black paperboard. Photograph by the thor.
gure 103. Folding experiment 1 - black - top view: Black foam core and black paperboard. Photograph by the thor.
gure 104. Folding experiment 1 - black: Black foam core and black paperboard. Photograph by the author.
gure 105. Folding experiment 2 - white: White foam core and white paperboard. Photograph by the author.
gure 106. Folding experiment 2 - white: White foam core and white paperboard. Photograph by the author.
gure 107. Folding experiment 2 - white: White foam core and white paperboard. Photograph by the author.
gure 108. Folding experiment 3 - aluminium foil. Photograph by the author.
gure 109. Folding experiment 4 - grey wrapping paper. Photograph by the author.
ure 110. Folding experiment 5 - black fly screen. Photograph by the author.
ure 111. Folding experiment 6 - clear gift wrapping paper. Photograph by the author.
ure 112. Folding experiment 7 - brown wrapping paper. Photograph by the author.
ure 113. Folding experiment 8 - wire. Photograph by the author.
ure 114. Folding experiment 8 - wire. Photograph by the author.
ure 115. Site in context: Polo Park Shopping Center, Winnipeg. Image by the author.
ure 116. Site Plan, scale 1/200: Polo Park Shopping Center, Winnipeg. Image by the author.
ure 117. View from South: Traveling Exhibition System (TES) in Polo Park Shopping Center. Image by the hor.
ure 118. View from South: Traveling Exhibition System (TES) in Polo Park Shopping Center. Image by the hor.
ure 119. View from East. Image by the author.
ure 120. View from North. Image by the author.
ure 121. East Elevation Image by the author.
ure 122. View from East upper level. Image by the author.
ure 123. West Elevation. Image by the author.
ure 124. View from North. Image by the author.

Figure 125. North Elevation. Image by the author.
Figure 126. Ortographic top view. Image by the author.
Figure 127. Layout 1, Exhibition Plan. Image by the author.
Figure 128. Manitoban Weddings South Elevation. Image by the author.
Figure 129. View of Mise-en-scene at entrance. Image by the author.
Figure 130. Interior Elevation 1. Image by the author.
Figure 131. Ticket&Information Desk and Narrative Part 1. Image by the author.
Figure 132. Narrative Part 2. Image by the author.
Figure 133. Narrative Part 2. Image by the author.
Figure 134. Interior Elevation 2. Image by the author.
Figure 135. Narrative Part 3. Image by the author.
Figure 136. Narrative Part 3. Image by the author.
Figure 137. View of Hands-on Installation. Image by the author.
Figure 138. View of Hands-on Installation. Image by the author.
Figure 139. View of Interactive Installation. Image by the author.
Figure 140. View to exhibition exit. Image by the author.
Figure 141. Exit to the mall. Image by the author.
Figure 142. Base Plate: Kit of parts post set. Image by the author.
Figure 143. Column: Kit of parts post set. Image by the author.
Figure 144. Joiner Type1: Kit of parts post set. Image by the author.
Figure 145. Corner Truss: Kit of parts truss set. Image by the author.
Figure 146. Truss: Kit of parts truss set. Image by the author.
Figure 147. Joiner Type2: Kit of parts truss set. Image by the author.
Figure 148. Parallel Brace: Kit of parts side set. Image by the author.
Figure 149. Curtain cuff: Kit of parts side set. Image by the author.
Figure 150. Didactic Panel: Kit of parts side set. Image by the author.
Figure 151. Hinged Pin: Kit of parts side set. Image by the author.
Figure 152. Frame front connection, scale 1/50. Image by the author.
Figure 153. Frame side connection, scale 1/50. Image by the author.
Figure 154. Structural Perspective 1. Image by the author.
Figure 155. Structural Perspective 2. Image by the author.
Figure 156. Frame connection Section C-C, scale 1/50. Image by the author.
Figure 157. Frame connection Section A-A, scale 1/50. Image by the author.
Figure 158. Frame connection Section B-B, scale 1/50. Image by the author.
Figure 159. Base Plate to Column connection 1: Components of post set. Image by the author.
Figure 160. Base Plate to Column connection 2: Components of post set. Image by the author.

igure 161. Column to Column connection 1: Image by the author.
igure 162. Column to Column connection 2. Image by the author.
igure 163. Exploded View 1: Post set connection. Image by the author.
gure 164. Exploded View 2: Post set connection. Image by the author.
gure 165. Base Plate Plan, scale 1/5. Image by the author.
gure 166. Base Plate Section, scale 1/5. Image by the author.
gure 167. Base Plate Perspective. Image by the author.
gure 168. Base Plate Elevation. Image by the author.
gure 169. Post plan, scale 1/2. Image by the author.
gure 170. Post section detail, scale 1/2. Image by the author.
gure 171. Post perspective. Image by the author.
gure 172. Post section, scale 1/5. Image by the author.
gure 173. Joiner Type1 plan, scale 1/2. Image by the author.
gure 174. Joiner Type1 section, scale 1/2. Image by the author.
gure 175. Exploded View 1: Truss set connection. Image by the author.
gure 176. Exploded View 2: Truss set connection. Image by the author.
gure 177. Exploded View 3: Truss set connection. Image by the author.
gure 178. Exploded View 4: Truss set connection. Image by the author.
gure 179. Corner Truss Section, scale 1/5. Image by the author.
gure 180. Corner Truss perspective. Image by the author.
gure 181. Truss section detail, scale 1/10. Image by the author.
ure 182. Truss section, scale 1/15. Image by the author.
ure 183. Truss perspective. Image by the author.
ure 184. Joiner Type2 plan, scale 1/2. Image by the author.
ure 185. Joiner Type2 elevation, scale 1/2. Image by the author.
ure 186. Joiner Type2 perspective. Image by the author.
ure 187. Exploded View 1: Side set connection. Image by the author.
ure 188. Exploded View 2: Side set connection. Image by the author.
ure 189. Exploded View 3: Side set connection. Image by the author.
ure 190. Parallel Brace plan, scale 1/2. Image by the author.
ure 191. Parallel Brace elevation, scale 1/5. Image by the author.
ure 192. Curtain Cuff plan, scale 1/2. Image by the author.
ure 193. Curtain Cuff side elevation, scale 1/2. Image by the author.
ure 194. Curtain Cuff perspective. Image by the author.
ure 195. Didactic Panels back elevation, scale 1/20. Image by the author.
ure 196. Didactic Panels hook detail, scale 1/2. Image by the author.
ure 197. Didactic Panels side elevation, scale 1/20. Image by the author.

Figure 198. "L" Type Layout Exhibit Plan. Image by the author.
Figure 199. "L" Type Layout Exhibit Structural Perspective. Image by the author.
Figure 200. "T" Type Layout Exhibit Plan. Image by the author.
Figure 201. "T" Type Layout Exhibit Structural Perspective. Image by the author.
Figure 202. "Narrow U" Type Layout Exhibit Plan. Image by the author.
Figure 203. "Narrow U" Type Layout Exhibit Structural Perspective. Image by the author.
Figure 204. "Wide U" Type Layout Exhibit Plan. Image by the author.
Figure 205. "Wide U" Type Layout Exhibit Structural Perspective. Image by the author.
Figure 206. . Exhibition furniture – Display Boxes. Image by the author.
Figure 207. Exhibition furniture – Display Systems. Image by the author.
Figure 208. Exhibition furniture – Exhibition Banner. Image by the author.
Figure 209. Exhibition furniture – Hands-on Table. Image by the author.
Figure 210. Exhibition furniture – Interactive Installation. Image by the author.
Figure 211. Exhibition furniture – Ticket & Information Desk. Image by the author.
Figure 212. Small display box perspective. Image by the author.
Figure 213. Medium display box perspective. Image by the author.
Figure 214. Large display box perspective. Image by the author.
Figure 215. Large display box perspective. Image by the author.
Figure 216. Display System Type1 ortographic top view. Image by the author.
Figure 217. Display System Type1 perspective. Image by the author.
Figure 218. Display System Type2 perspective. Image by the author.
Figure 219. Display System Type2 side elevation. Image by the author.
Figure 220. Hands-on Desk Plan - open. Image by the author.
Figure 221. Hands-on Desk Plan - closed. Image by the author.
Figure 222. Hands-on Desk elevation - open. Image by the author.
Figure 223. Hands-on Desk elevation - open. Image by the author.
Figure 224. Hands-on Desk side elevation - closed. Image by the author.
Figure 225. Interactive Installation Mirror front elevation. Image by the author.
Figure 226. Interactive Installation Mirror perspective. Image by the author.
Figure 227. Interactive Installation Mirror perspective. Image by the author.
Figure 228. Exhibition Banner. Image by the author.
Figure 229. Ticket & Information Desk front elevation. Image by the author.
Figure 230. Ticket & Information Desk back elevation. Image by the author.
Figure 231. Ticket & Information Desk perspective. Image by the author.
Figure 232. Ticket & Information Desk perspective. Image by the author.
Figure 233. Costume Museum of Canada logo design. Image by the author.

LIST OF TABLES

able 1: Synthesis of Literature Review. Table by the author.
able 2: User Profiles. Table by the author.
able 3: Spatial Requirements for "Manitoban Weddings Exhibition". Table by the author.
able 4: Synthesis of Literature Review and Spatial Implications. Table by the author.
able 5: Display Requirements. Table by the author.
able 6: Artifact Conservation Requirements. Table by the author.

CHAPTER 1

INTRODUCTION

Project Description and Justification
Research Objectives and Methodology
Client: The CMC

1.1 PROJECT DESCRIPTION AND JUSTIFICATION



In general terms, the process of exchanging ideas or feelings is called communication. Humans interact with each other and their surrounding environment on an everyday basis. These interactions are made possible via various channels of communication. Unlike other species, humans use multitudes of communication methods ranging from verbal to non-verbal: languages, songs, letters, telegrams, photographs, pictures, clothing, sculpture etc. in order to convey the information.[1] Human made non-verbal material things are known as artifacts.[2] From a communication studies perspective, these objects are tools to send messages - which might be direct information or an interpretation of our human world. These messages not only include transferred information, but also speak about ourselves.[3]

Collections of artifacts commonly known as, cabinets of curiosities first became popular with the bourgeoisie during the Renaissance. Collectors assembled unusual and natural objects, which they grouped and displayed in special rooms.[4] These collections were privately owned and were open for friends and relatives to visit and study at first. The richness and size of the collection demonstrated the owner's prosperity and were associated with family's historical bonds. Later, private collections were gradually opened to the public or were donated to institutions for the same purpose. For instance, The Ashmolean Museum, which is the first public museum in Britain, was donated by Elias Ashmole to the University of Oxford in 1677.[5]

---

1 Ruth H. Finnegan, *Communicating: The Multiple Modes of Human Interconnection* (London: Routledge, 2002), xv.

2 Ibid, 7.; Michael B. Schiffer and Andrea R. Miller, *The Material Life of Human Beings: Artifacts, Behavior, and Communication* (London ; New York: Routledge, 1999), 2, 31.

3 Finnegan, *Communicating: The Multiple Modes of Human Interconnection*, 10; Schiffer and Miller, *The Material Life of Human Beings: Artifacts, Behavior, and Communication*, 5.

4 Pam Locker, *Basics Interior Design 02: Exhibition Design*, Vol. 2 (Lausanne: AVA Academia, 2011), 21.

5 Ashmolean Museum of Art and Archaeology, "History of the Ashmolean," Ashmolean Museum of Art and Archaeology, http://www.ashmolean.org/about/historyandfuture/ (accessed May 20, 2013).



Figure 2. Jet [illegible] Museum [illegible]

During the Industrial Revolution, visiting collections became a popular past-time for the public. In the late nineteenth century collections and state owned buildings to display collections grew in size.[6] In the same way as privately owned collections, the state collections represented the richness and longevity of the nation. The British Museum, opened in 1753, is acknowledged as the first national public museum.[7]

Simultaneously, archeologists began collecting and grouping artifacts as collections were getting bigger in size. By the mid-twentieth century social scientists came to acknowledge the importance of artifacts to our understanding of past cultures and societies. Today it is realised that we, as human beings, connect human artifacts with a society's development, thinking and values.[8] As a result, today artifacts are preserved and displayed to the public because they are cultural and historical evidence of our physical world. Cultural artifacts in museum collections attract our attention because we want to see how society has developed and how cultural artifacts have varied over time. Museum collections form a bridge between our past and present life because artifacts communicate with us. Brian Schiffer describes the artifact as a physical thing that demonstrates properties of the group that created it.[9] Furthermore, anthropologist James Deetz indicates that the artifact and material culture mean more or less the same thing which is "culturally patterned data that provide the archaeologist with insights to life in the past."[10] Cultural artifacts communicate their craftsmanship, material sources and cultural values to us. In a museum collection it is possible to see how methods, materials and ways of communication have been developed by the society over time.

---

6 Pam Locker, *Basics Interior Design 02: Exhibition Design*, 21.

7 The British Museum, "History of the British Museum," The British Museum, http://www.britishmuseum.org/about_us/the_museums_story/general_history.aspx (accessed November 6, 2012).

8 Joanne Bubolz Eicher, Sandra Lee Evenson, and Hazel A. Lutz, *The Visible Self: Global Perspectives on Dress, Culture, and Society*, 3rd ed. (New York: Fairchild Publications, 2008), 36.

9 Schiffer and Miller, *The Material Life of Human Beings: Artifacts, Behavior, and Communication*, 2.

10 James Deetz, in *Historical Archaeology and the Importance of Material Things: Papers of the Thematic Symposium, Eighth Annual Meeting of the Society for Historical Archaeology, Charleston, South Carolina, January 7-11, 1975*, ed. Leland Greer Ferguson (S.L.: The Society for Historical Archaeology, 1977), 10.





Cultural artifacts act to facilitate understanding of international communities, while "lessening tensions" between them.[11] As argued by UNESCO in "Temporary and Traveling Exhibits" exhibits of artifacts have positive effects on national and international communities: removing the language barrier by means of visual or auditory communication so that the information becomes accessible to most people, disseminating knowledge for educational means, and sharing common subjects of interest between communities.[12] It is important, therefore, to share the collections with various communities to assist in informing them about various cultures including their own. Museums stage exhibits -especially traveling exhibits- to educate and entertain the public on specific topics and create income for their institutions. Audiences are attracted to see various types of exhibits to see how cultural ideas are expressed through the display of artifacts.

Museum exhibits are important tools for staging cultural artifacts. In order to convey artifacts to people or narrate the story of artifacts, museums employ three dimensional space. Locker explains that exhibits in general are a form of communicating a narrative in a three dimensional space.[13]

11 Unesco, *Temporary and Travelling Exhibitions* (Paris, 1963), 59.
12 Ibid.
13 Locker, *Basics Interior Design 02. Exhibition Design*, 10.





Therefore, the space constitutes an environment for the narrative to be represented and understood by the visitors. The space consists of elements, both objects and communication elements such as, graphics, text, photographs, drawings and media such as film or video. In order to convey a narrative to a group or audience, the design of an exhibit requires the collaboration of various design disciplines with a curator. Design disciplines such as interior design, communication design, graphic design and lighting design are engaged in the process of creating exhibits. Spatial arrangements play a major role in the design. Locker asserts that interior design is the closest field to exhibit design due to the significance of spatial arrangements.[14] If exhibit design is concerned with creating a space that will showcase a narrative of artifacts, it is also concerned with arranging the form, materiality (surface), scale, and atmosphere of the space. Locker believes that exhibit design can stand on its own because it can convey a narrative in a space by primarily looking at spatial relationships, communication and display methods between audiences and objects.[15] Since artifacts are the result of different interactions of humans to humans and to the external environment, they serve as a mode of communication, and therefore should respond to human sensual responses or needs in order to be perceived.[16] At the core of human interaction, we employ our senses to perceive things that surround us.

14 Ibid, 7.
15 Ibid.
16 Schiffer and Miller, *The Material Life of Human Beings: Artifacts, Behavior, and Communication*, 158.

Material culture artifacts and collections serve as a cultural bridge between communities. Therefore, accessibility and circulation of such collections are important to a society's development and understanding of other's values. The traveling exhibit plays a significant role to reach out to various audiences. Traveling exhibits serve to connect and disseminate knowledge amongst communities.[17] The history of traveling exhibits goes back to 19th century England. The Victoria and Albert Museum in London instigated the first traveling collection. The Department of Science and Art (1856) report states that:

> In last year's report it was announced that a special collection was being formed for circulation in the provinces; and I have to state, that the undertaking has been fully carried out, and that after a year's experience of its working, the result has completely answered the expectations formed. The collection was put in circulation early in the spring ; and during the course of the year has visited five localities, namely, Birmingham, Nottingham, Macclesfield, Norwich and Leeds, the entire number of visitors being 55,701. The collection consists of upwards of four hundred specimens, taken from every section of the Museum, forming a faithful abstract or abridgement of the Marlborough House Museum.[18]

According to UNESCO, Victoria and Albert Museum's first traveling exhibit can be considered as a prototype of traveling exhibits. The first traveling exhibit in Canada dates back to 1919. The exhibition was called "The War Memorials." It travelled to Toronto and Montreal, from 1919 to 1924. The exhibit included works by A.Y. Jackson, David Milne, Wyndham Lewis and Paul Nash.[19] The exhibit displayed these artists' paintings on the theme of the Canadian War Memorial. The exhibit included the work of Canadian women artists, Frances Loring, Florence Wyle, Henrietta Mabel May, and Dorothy Stevens.[20]

---

17 Unesco, *Temporary and Travelling Exhibitions*, 58.

18 Great Britain Department of Science and Art, *Report of the Department of Science and Art* (London: George E. Eyre and William Spottiswoode, 1856), 70.

19 The National Gallery of Canada, "Our History: 1919 Exhibits," The National Gallery of Canada, http://www.gallery.ca/en/about/1910s.php#year_1919 (accessed 10 6, 2012).

20 Susan Butlin and Florence Carlyle, *The Practice of Her Profession: Florence Carlyle, Canadian Painter in the Age of Impressionism* (Kingston Ont. ; Ithaca N.Y.: McGill-Queen's University Press, 2009), 41.



Figure 8: Photographic study

Museums have many options to circulate their traveling exhibitions. Two of which are: to rent out their collection to another museum or to curate a mobile museum. On the one hand, the original owner of the collection (a museum) rents its collection to other museums that have suitable temporary gallery space. However, renting out a collection has some drawbacks.[21] The original owner or curator of the collection needs to arrange circulation with an agency. The agency is a group that has the responsibility of making insurance agreements, preparing the collection for travel, creating packing and setting up instructions, designing graphics for the collection and so on. Renting out work for a traveling exhibit can be a costly undertaking for museums. This kind of exhibit requires an installation team to allow it to be set up in temporary gallery space –if we consider that a collection does not come as ready to install in a gallery space-, care taking –preserving the collection in suitable conditions- and the careful transportation of the collection.[22] As an alternative to this model, there are also mobile museums or packaged exhibits that can be moved and be displayed in a temporary gallery space with the exhibit space fully arranged. The Mobile museum offers a fully installed exhibit design in comparison with renting a collection. However, the amount of artifacts that can be displayed is limited.

21 Unesco, *Temporary and Travelling Exhibitions*, 62.
22 Ibid.



Figure 9: 109 Pacific Avenue Gallery Space



The Costume Museum of Canada (CMC), located in Winnipeg, Manitoba, was the first of its kind in Canada, according to the Association of Manitoba Museums.[23] The CMC works as a repository where Canadian clothing, textile and pertinent accessories are collected, preserved, and presented. The museum started from a fashion show held in Dugald, Manitoba in 1953. The collection gradually grew in size and became the 'Dugald Costume Museum' on June 3rd, 1983 under the direction of Winnifred Van Slyck as President Emeritus and Honorary Curator of the Dugald Costume Museum.[24] The museum was recognized as a Special Theme Museum in 1998 and shortly it became the 'Costume Museum of Canada'.[25] In order to attract more visitors, the museum moved to 109 Pacific Avenue, Winnipeg and opened its doors on July 12th, 2007.[26] The collection consists of 35,000 pieces that span 400 years. The collection represents fashion and social history of provincial, national and international scope with costumes, accessories, household textiles and objects, and some furniture and furnishings from the 18th century to the present.

23 Association of Manitoba Museums, "Costume Museum of Canada," Association of Manitoba Museums, http://museumsmanitoba.com/dir/winnipeg/1.html (accessed January 20, 2012).

24 ArchivesCanada.ca, "Winnifred Van Slyck fonds," ArchivesCanada.ca: Canadian Archival Information Network, http://www.archivescanada.ca/english/search/ItemDisplay.asp?sessionKey=999999999_142&l=1&lvl=1&v=0&coll=1&itm=228108&rt=1&bill=1 (accessed November 2, 2012).

25 Association for Manitoba Archives, "Dugald Costume Collection Incorporated," Association for Manitoba Archives. http://nanna.lib.umanitoba.ca/atom/index.php/dugald-costume-collection-incorporated (accessed March 7th, 2014).

26 "Minister Welcomes Costume Museum to New Home," Province of Manitoba News Releases, http://news.gov.mb.ca/news/index.html?archive=&item=1954 (accessed November 2, 2012).



Figure 11: 109 Pacific Avenue Gallery Space



Figure 12: 109 Pacific Avenue Gallery Space

The collection provides a narrative to clothing and adornment artifacts through history.[27] However, the CMC closed in 2010 due to financial problems. As a result, the collection has been moved to permanent storage and is without a gallery or an exhibition space. The museum is working towards financial viability largely by curating and staging traveling exhibits around Winnipeg. Volunteers of the CMC help to transport and set up the collection and the mannequins for these traveling exhibits. However, the CMC's current financial restrictions limit what they can do and how they can stage a traveling exhibit.[28]

The practicum project aims to design a flexible and dynamic Traveling Exhibition System (TES) that will allow the CMC to create traveling exhibits of their collection in a cost effective and sustainable manner with a minimum requirement for skilled assembly. The project is well-suited to investigate traveling exhibitions and deployable structures because it uses the properties of mobility to fulfill the needs of the CMC and to contribute to the popular understanding of Canadian social history.

27 "The Costume Museum of Canada," Things To Do, http://www.tourismwinnipeg.com/things-to-do/historical/display,profile/01283/the-costume-museum-of-canada-closed-until-a-new-location-is-found (accessed November 2, 2012)

28 Trudy Hansford, e-mail message to author, March 17, 2012.

DEFINITIONS RELATED TO COSTUME AND COSTUME RESEARC

COSTUME HISTORY

"Costume history was the generally accepted description of a subject that covered all aspects of display, research and writing about clothing from antiquity to the present"

(Valerie Cumming, Understanding Fashion History,

DRESS

"Dress is a crucial aspect of embodiment, shaping the self physically and psychologically."

(Eds. Joanne Entwistle and Elizabeth B. Wilson, Body Dress

COSTUME

"A set of clothes in a style typical of a particular country or historical period"

(Oxford Dicti

DRESS

"A piece of garment for a woman or girl that covers the body and extends down over the legs."
"Clothing of a specified kind for men or women."

(Oxford Dicti

FASHION

"A popular or the latest style of clothing, hair, decoration, or behavior."

(Oxford Dicti

STAGE COSTUME

"Distinctive clothing for individuals or groups of performers, a visual presentation of character or idea throu clothed physical appearance."

(The Oxford Encyclopedia of Theatre and Perform

1.2 DESIGN OBJECTIVES

The literature about cultural communication, narratology, and mise-en-scène will be reviewed in relation to exhibits and traveling exhibits. Investigation of the literature will bring some key information and inform the design concept for the Traveling Exhibition System (TES). The proposed project's intentions are to make cultural information accessible and available to local communities by the design of a traveling exhibition system; to convey a Canadian cultural message through the exhibit design; to narrate stories of cultural artifacts via a spatial concept by utilizing a "mise-en-scène" approach; and to create a flexible and sustainable design solution that will meet the CMC's needs. The following three questions will frame the research for the practicum project:

I. What kind of design elements and spatial qualities should be considered to enhance the cultural experience of the exhibit goer?
II. What kind of spatial characteristics should be considered when designing a traveling exhibit space in order to successfully convey a cultural message?
III. How is a culture narrated via its artifacts in an interior space using the concept of mise-en-scène ?



ure 13. Photographic study of dress buttons from Antique Store

1.3 METHODOLOGY

Qualitative research methods have been utilized in the investigation for this project. In order to obtain design programming information; site visits, face-to-face informal interviews, e-mail communication, public documents, and audiovisual materials have been consulted. I conducted two site visits to the CMC. The first visit to the CMC was as an observer. The second visit was as a participant/volunteer during the Open Doors Winnipeg event. In addition to firsthand experience, photographs and videos were taken during the site visits. The experiences brought light to the investigation and gave the researcher a good understanding of the problems with the CMC's traveling exhibits, displays, and fragility of the textile artifacts.

Besides firsthand experience, face-to-face informal interviews carried out with existing and former CMC staff. Stephanie Middagh, who is a former director/curator of the CMC, provided information on the CMC's historical background, CMC's collection, exhibitions that she worked on and curated, visitor profiles, as well as insights about modern exhibition design. Jo Ann Greisman, who is the existing treasurer in the museum, provided information on CMC's collection, current storage space, CMC's previous outreach and exhibition programs, and current financial circumstances. In addition, Trudy Hansford, who is the existing vice-president, provided information on the CMC's mandate, how current traveling exhibitions are executed, and current situation of the museum. The interviews were invaluable to the project in order to form design programming and design concept and to discuss existing problems with the current and former staff and to develop a detailed understanding of the requirements of traveling exhibits. In addition to face-to-face interviews, informal e-mail communication was conducted with the CMC's staff.

Public documents and visual materials were consulted from the University of Manitoba Archives, the Virtual Museum of Canada, Archives Canada, Museums of Canada, Manitoba the Manitoba Historical Society, the Manitoba Provincial Government, the Winnipeg Free

Press, CBC News Manitoba and the Association of Manitoba Museums. Documents include the newspaper report by Rosemary Malaher about the Dugald Costume Museum, photographs, Manitoban wedding photographs, newspaper articles, online virtual 3d tour of the CMC's gallery space of previous gallery space on Pacific Avenue. The information that is gathered has helped to understand the history and purpose of the CMC, to justify my rationale and design programming as well as to form an exhibition theme for the TES.

Precedents have also been consulted in relation to design programming, conceptual design, theories (presented in chapter 2) and design detailing for the practicum project. The precedents have provided practical and conceptual information for the Traveling Exhibition System (TES)'s design. These precedents are design projects from retail, set design and pop up store: Villa Moda, Their Day and Zalando Pop-up Shop. These recent design projects will inform and guide the Traveling Exhibition System (TES) design in terms of design programming, technologies, and spatial design.

The literature review of academic publications regarding cultural modes of communication, narratology, mise-en-scène and exhibition design have provided an invaluable theoretical base for this investigation. In particular, cultural modes of communication look at how artifacts and humans are connected by means of cultural values. The process of making artifacts creates narratives. Therefore, narratology, a theory that searches for aspects of narratives, was analyzed in this investigation. The outcome guided to generate an exhibition theme, which is Manitoban weddings, for the traveling exhibitions. In order to communicate the exhibition concept in a three dimensional space, mise-en-scène, which is a theatrical term which encompasses space, performance, and time was investigated and utilized in the design of Traveling Exhibition System (TES).

1.4 THE CLIENT: COSTUME MUSEUM OF CANADA



Figure 14: Who Needs White Exhibit

CLIENT HISTORY AND PROGRAMS

As noted previously, the Costume Museum of Can (CMC) was rooted in Dugald, Manitoba, Canada. museum was first known as the Dugald Costu Museum. The idea of a costume museum in Du came from the success of a fashion show. In the sp of 1953, the Dugald Women's Institute held a fas show to fundraise. Costumes come from memb attics or basements.[29] Besides its entertainment fundraising value, the show was a good opportunit compare contemporary and period clothing. The fas show was presented twice. The show was invite neighboring towns. The success of the show led institution to put on the same presentation in churc around Manitoba and in Winnipeg.

29 Rosemary Malaher, "My Basement is Full: The Buildi the Dugald Costume Museum" 1990, 1.



Figure 15: Who Needs White Exhibit

ne the fashion parade grew and separated from the Dugald Women's Institute changing ame to 'The Dugald Ladies Fashion Review'. "The fame of the production spread and xpertise of the group increased, the show became popular as entertainment for local, nal and international conventions, as well as many centennial celebrations throughout toba."[30] The size of the collection grew and the administration started thinking about uture of the collection. One option was donating the collection to the Museum of Man Nature, but the size of the collection was large and growing; so they looked for a rate building to house and to display the collection. The members' effort resulted in w building in Dugald. The building opened 30 years after the first fashion show, which n 1953.[31]

Ibid, 3.
Ibid.



Figure 16. Grand Opening of CMC on 109 Pacific Avenue

FINANCIAL STRUGGLES

In 2010 the CMC closed its doors in 109 Pacific Avenue, Winnipeg and moved out all its collection Millennium Centre storage space. The museum maintains volunteers to put on displays of costum and traveling exhibitions when opportunities arise. These displays have helped the CMC to be solver The museum wants to be involved in traveling exhibits as a way to continue their operations. Howeve demand for the displays around Winnipeg is limited in scale and scope. A problem with exhibitir costumes is the handling and transportation of the exhibit materials. Jo Ann Greisman, treasurer f the CMC, explains that mannequins need to be wrapped in waterproof transport bags and artifac (costumes) need to be transported in acid free transport bags. The artifacts are placed in trunks. Th trunks are loaded and transported in members' or volunteers' cars and handling of artifacts require using white gloves. The setting up and tearing down is done by the CMC staff and volunteers. Ther are security problems encountered in public places because people want to touch the garments. addition, the museum's existing exhibit cases are inappropriate for traveling exhibitions.[32]

32 Jo Ann Greisman, e-mail message to author, April 9, 2012.



Figure 17: Grand Opening of CMC on 109 Pacific Avenue

MC EXHIBITIONS

rrently, the CMC stores all the artifacts in Millennium Centre, Winnipeg with no dedicated gallery ace available to them. The artifacts are stored in cardboard boxes in shelving units, in the basement. hen an exhibit opportunity comes up, CMC staff calls for a group of volunteers to select and to pack the artifacts that are related to the theme. Related artifacts are selected from the information cards t are created by former and current the CMC staff. The CMC exhibits thus far: "The Little Black ess", Ruth Funk Textile and Art Centre; the Icelandic Museum, Gimli; the Gabriel Roy Museum, the mp Shilo Museum; Polo Park, Winnipeg; senior residences, Winnipeg; the Winnipeg Art Gallery, llennium Centre, Winnipeg; the Manitoba Museum, Winnipeg, the Manitoba Club, Winnipeg.

CHAPTER 2

LITERATURE REVIEW

Artifacts speak to us: A Cultural Mode of Communication

Dresses tell narratives: Narratology Explored

Setting the stage for the costumes: Mise-en-scène

Conclusions

The following chapter will form a theoretical basis for the practicum project. The first section of the chapter, Artifacts speak to us: A Cultural Mode of Communication looks into the importance of artifacts in human communication, providing an understanding of culture in the context of the exhibition. The next section, Dresses tell narratives: Narratology Explored analyses the significance of narrative telling in human perception and in exhibit design. The next section, Setting the stage for the costumes: Mise-en-scène investigates the importance of mise-en-scène and how it could contribute to the field of exhibit design. The Costume Museum of Canada shares its collection with the public and presents the evolution of Canadian dress and society through its costume collection. The artifacts in the collection inform and entertain the public as well as communicating Canadian material culture.

2.1 ARTIFACTS SPEAK TO US: A CULTURAL MODE O

2.1.1 DEFINING CULTURE: MATERIAL CULTURE AND ARTIFACTUAL C

Culture is broadly defined as everything including human work and thought that is socially conveyed.[33] Culture is a common subject matter and interest of social sciences including anthropology, archaeology, sociology, and cultural studies; each one looks at culture from different perspectives. Well-known archaeologist William Rathje asserts that culture is "a society's distinctive behaviours, artifacts, and beliefs".[34] Cultural studies, defines culture as a "mobile signifier" that distinguishes one group's human activity from another. From this perspective, culture consists of signs and codes that are transferable and that is how we make sense of the world.[35]

Artifacts, or material culture as James Deetz, William Rathje, Michael Schiffer define it, forms the physical part of the culture. Schiffer defines an artifact as "any material, in contradistinction to spiritual or mental, phenomenon that exhibits one or more properties produced by a given species".[36] Artifacts can be perceived through human senses, but also they carry embedded cultural meanings. Material culture encompasses all man-made things, as Deetz states "material culture as that segment of man's physical environment which is purposely shaped by him according to culturally dictated plans."[37] An archaeologist, Deetz emphasizes the object behaviour relationship. He asserts that man's physical environment is shaped by his behaviours as well as his behaviours are shaped according to his physical environment.[38]

33 Steve Kleinedler, ed., *The American Heritage® Dictionary of the English Language* (Boston: Houghton Mifflin Harcourt, 2007), s.v. "Culture," http://www.credoreference.com.proxy1.lib.umanitoba.ca/entry/hmdictenglang/culture (accessed May 20, 2013).

34 William L. Rathje and Michael B. Schiffer, *Archaeology* (New York: Harcourt Brace Jovanovich, 1982), 5.

35 The Sage Dictionary of Cultural Studies, *Culture*, in the Credo Reference, http://www.credoreference.com.proxy1.lib.umanitoba.ca/entry/sageukcult/culture (accessed May 20, 2013).

36 Schiffer and Miller, *The Material Life of Human Beings: Artifacts, Behavior, and Communication*, 2.

37 Deetz, 10.

38 Ibid.

ON

Mihaly Csikszentmihalyi, psychologist, and Eugene Rochberg-Halton, sociologist, surveyed American families to determine the meaning of possessions. Their research looked at object making and creating from a different perspective. The researchers state that "in Western cultures the broad stages of history are marked by the kind of objects people could make. From this perspective the evolution of humankind thus tends to be measured not by gains in intellect, morality, and wisdom; the benchmarks of the progress have to with our ability to fashion things of ever greater complexity in increasing numbers"; thereby emphasizing the importance of object making in the progress of civilization.[39] The researchers determined that behind object creating are cultural oriented views and goals. Therefore, they state that object making is a process of cultivation.[40]

African-American literature scholar Houston A. Baker, Jr. supports the idea of cultivation defined as artifactual process, and gives a cultural example from an African ritual ceremony.

> An African ritual mask, for example, is an artifact because it has a socially determined range of formal variation and ceremonial use. No matter how creative the mind and soul of its maker, the mask must remain within the limits of the social imaginary if it is to function precisely as an Artifactual African ritual mask. New materials and technologies may alter the formal properties of a particular representative mask, but these alterations must follow accepted social lines[41]

39 Mihaly Csikszentmihalyi and Eugene Rochberg-Halton, *The Meaning of Things: Domestic Symbols and the Self* (Cambridge Eng. ; New York: Cambridge University Press, 1981), ix.
40 Ibid, xi.
41 Houston Alfred Baker Jr., "Beyond Artifacts: Cultural Studies and the New Hybridity of Rap," in *Cultural Artifacts and the Production of Meaning: The Page, the Image, and the Body*, eds. Margaret J. M. Ezell and Katherine O'Brien O'Keeffe (Ann Arbor: University of Michigan Press), 183.

Theorists agree that artifacts address the five human senses. As an example, in Western culture, if a woman dresses in black, covers her head and wears black sun glasses, she signifies that she is mourning for someone's death, or she has attended at a funeral. Therefore, from her physical appearance, observers could understand what her intention is, or that she communicates that she has lost someone. Ruth Finnegan, sociologist, maintains that humans use multitudes of mediums to communicate or interact with each other. Finnegan states that "we (humans) use gestures, sounds, writing, images, material objects, bodily contacts, supported by the more or less agreed conventions through which we variously recognize such usages as purposive forms of interaction and mutual influence".[42] Finnegan emphasizes that, unlike a well-known communication tool, language, these mediums gestures, sounds, writing, images, material objects, bodily contacts transfer, communicate or convey meaning or information to humans. In other words, these mediums interconnect humans to each other.[43]

42 Finnegan, *Communicating: The Multiple Modes of Human Interconnection*, 6.
43 Ibid, 5-8.

Schiffer, an American anthropologist, calls these non-traditional mediums behaviour and continues that behaviour is communication and communication is behaviour; therefore, he introduces a non-physical concept as a communication tool.[44] He also, articulates a definition of nonverbal as "the communication 'modes' beyond language that are often termed, as a group, nonverbal communication".[45] Finnegan builds upon Schiffer's idea of behaviour by saying

> Communicating is envisaged as creative human process rather than transport of data or meeting of 'minds', and goes beyond the preoccupation with 'information' and 'the information revolution' typical of much current discussion. It encompasses the many modes of human interacting and living, both near and distant – through smells, sounds, touches, sights, movements, embodied engagements and material objects.[46]

Therefore, Finnegan implies that communication does not have to transfer the pure linguistic information, but "the unspoken, experience and emotion".[47] Since the nonverbal way of communicating speaks to five senses of humans, Finnegan also categorizes these mediums based on the five senses: "auditory, visual, kinesic, proemics, and tactile".[48] Finnegan and Schiffer agree that humans do not solely rely on verbal communications, but also nonverbal representations of themselves in order to communicate.[49]

---

44 James M. Skibo and Michael B. Schiffer, *People and Things: A Behavioral Approach to Material Culture* (New York: Springer, 2008), 4.
45 Ibid, 31.
46 Finnegan, *Communicating: The Multiple Modes of Human Interconnection*, 5.
47 Ibid.
48 Ibid, 8.
49 Ibid, 8; Schiffer and Miller, *The Material Life of Human Beings: Artifacts, Behavior, and Communication*, 30.

2.1.2 CLOTH AND DRESS IN CULTURAL CONTEXT

Dresses and body dressing could also serve human interconnection. For example, in a wedding ceremony, the bride wears a white dress that symbolizes purity; she carries flowers that symbolize her affiliation to nature and beauty. These are the meanings our mode of dress express. So, what is dress and how does it affect human intercommunication? Joanne B. Eicher, Sandra Lee Evenson, Hazel A. Lutz, fashion anthropologists, define dress as "an assemblage of modifications of the body and/ or supplements to the body [...] as well as an equally long list of garments, jewelry, accessories, and other types of items added to the body as supplements."[50] In terms of dressing the body, Finnegan signals that humans are not only intellectual or rational beings, but also creative beings who could express themselves through modifications of their bodies dressing the body, facial expressions, or body positioning.[51]

If we look at the fashion history of cultures, for example the Chinese, North American and Turkish, we can observe that these three cultures were expressed in various ways through fashion culture. Christopher Breward, a scholar in Historical and Cultural Studies at the London College of Fashion, suggests dress aids in the expression of modernity "[...] modern fashionable clothing is a manufactured commodity that has been designed according to predominantly western social, economic, and esthetic values, and which in its formal and conceptual qualities as aided the shaping of a sense of the present for its various consumers".[52] Eicher et al. maintain that since dress is a product of human beings, it changes depending upon "human creativity and technology".[53] To conclude, materials and processes of a dress have the potential to inform public about the culture, technology, and time.

50 Eicher, Evenson, and Lutz, *The Visible Self: Global Perspectives on Dress, Culture, and Society*, 29.
51 Finnegan, *Communicating: The Multiple Modes of Human Interconnection*, 8.
52 Christopher Breward, *Fashion* (Oxford ; New York: Oxford University Press, 2003), 16.
53 Eicher, Evenson, and Lutz, *The Visible Self: Global Perspectives on Dress, Culture, and Society*, 4.

As dress communicates cultural values, material and technology, it also communicates about its wearer's identity. For example, if we see a man wearing a suit, the first thing we think before verbal interaction, is regarding his social status in society. Eicher et al. explain that "culturally specific terms for dress items and processes also assume a social context of use for each aspect of dress. This association with the context of use enables dress to communicate information nonverbally about the social identity of the wearer."[54]Eicher et al. add that many things are involved in the dressmaking process: cultural values, physical and social needs. Finnegan stresses that the way people dress affects others' judgement of them. The reason involves particular roles, status in society, gender, and achievements that are interpreted by the viewer.[55] Finnegan also refers to Peroni and Wolff's theory of 'the cloth body' that is significant to the projection of self in a society as the dressing vocabulary extends and signifies social roles.[56]

Moreover, dressing the body does not only speak about individuals' social status, but also expresses their thoughts, personal stances, and political thoughts. For example, with today's textile technology, a "clean up your act" (environmental friendly) printed tee-shirt demonstrates a person's environmental stance. Another example in North America in the late 1960's, hippie style was very common among youth who were against the war in Vietnam. The headband, the long hair, and multicolored floral clothing became a representation of a political position.
To summarize, dress speaks to human senses, especially visual senses in terms of human communication as an extension of self that suggests the values of the wearer. Dressing the body is a stronger visual communication tool than verbal interactions in human interconnection.

54 Ibid, 26-27.
55 Finnegan, *Communicating: The Multiple Modes of Human Interconnection*, 131.
56 Ibid, 133.

2.1.3 CLOTH AND DRESS IN EXHIBIT STUDIES

Even though textiles are susceptible to light, heat and degrading organic compunds, they offer a visual cultural communication. Not everyone can necessarily explain the era of an art work; however, most people can understand the era of a clothing item by looking at the style, materials, and technologies used. Alexandra Palmer, Fashion Costume Senior Curator, states that exhibition goers are interested in the visual experience of tactility of clothing in the exhibitions. "[...] Actually touching or wearing the garments is forbidden because handling damages the artifacts though the transfer of bodily fluids and dirt. Most visitors naturally imagine what it would be like to wear the clothes on display, and they have opinions about them, making it challenging for the curator to prompt new ways of thinking about designs that visitors may not like."[57] Suzanne Ramljak, art historian, writer, and curator, also emphasizes the importance of clothing and textiles in exhibits by stating "Costume and textile exhibitions in museums are ephemeral events that create intimate experiences, resulting in a unique union of psychological, physiological and social factors".[58]
Valerie Steele argues that most researchers give priority to the credibility of written sources or visual representations. However, she insists, analysing the real object has a great deal of knowledge to offer to scholars.

> Yet of all the methodologies used to study fashion history, one of the most valuable is the interpretation of objects. Naturally, scholars must also employ standard historical research methods (working in the library), but object-based research provides unique insights into the historic and aesthetic development of fashion. [59]

Jules Prown agrees writing in detail that "style is inescapably culturally expressive" and "[...] the formal data embodied in objects are, therefore, of value as cultural evidence.[60] "[...] artifacts are primary data for the study of material culture, and, therefore, they can be used actively

57 Alexandra Palmer "Reviewing Fashion Exhibitions," *Fashion Theory* 12, no. 1 (2008): 121-26, doi: 10,2752/175174108X269595 (accessed May 20, 2013), 32.
58 Suzanne Ramljak, "Intimate Matters: Objects and Subjectivity," in *Objects and Meaning: New Perspectives on Art and Craft*, ed. M. Anna Fariello and Paula Owen (Lanham, Md.: Scarecrow Press, 2004), 86.
59 Valerie Steele, "A Museum of Fashion Is More Than a Clothes-Bag," *Fashion Theory* 2, no. 4 (1998): 328.
60 Jules Prown David, "Style as Evidence," *Winterthur Portfolio* 15, no. 3 (1980), 197, http://www.jstor.org/stable/1180742 (accessed May 20, 2013).

as evidence rather than passively as illustrations".[61] As well as informing exhibition goers about material technologies, the artifact also provides information about the dresses' functionality in a culture, and shows the intent of the creator.

E. McClung Fleming, professor of history, adds that "one important form of cultural analysis deals with the functions performed by the artifact in its culture [...] function involves both the concrete and the abstract aspects of the artifact, [...] its various intended uses, and its unintended roles".[62] As theorists argue, cloth has much to offer to humans in terms of communication. Due to their visual, tactile, and auditory clothing has much to offer to exhibitions and museums. Julia Petrov asserts "costume in particular, due to its being a trace of a body, was particularly effective at enabling viewers to perform mental chronospatial displacements. The visual classification of fashion as a reflection of socio-cultural development was only one part of a greater drive toward the classification of global knowledge [...]." [63]

Also, Aileen Ribeiro suggests that touching and seeing clothing artifacts of "our heroes" will emotionally evoke pride, or become a moving experience that link people to their past.[64] In my personal experience, Anitkabir in Ankara, Turkey is a museum site that is dedicated to Republic of Turkey's founding father Ataturk's personal belongings. Seeing Ataturk's clothing display strengthens the viewer's bond to the nation's past. That is why Turks visit Anitkabir several times a year. Petrov represents this emotional connection thus: "sometimes this historical narrative acts as a way of creating a unified identity, as Susan Crane calls it, "memory objectified, not belonging to any one individual as to audiences, publics, collectives, and nations, and represented via the museum collections." [65]

---

61 Jules Prown David, "Mind in Matter: An Introduction to Material Culture Theory and Method" *Winterthur Portfolio* 17, no. 1 (1982), 1, http://www.jstor.org/stable/1180761 (accessed May 20, 2013).

62 E. McClung Fleming, Artifact Study: A Proposed Model, in the JSTOR, http://firstsearch.oclc.org.proxy1.lib.umanitoba.ca/WebZ/FSPage?pagetype=return_frameset:sessionid=fsapp7-55326-hjv0nogv-6fml0k:entitypagenum=4:0:entityframedurl=http%3A%2F%2Fwww.jstor.org%2Fjournals%2F00840416.html:entityframedtitle=WorldCat:entityframed (accessed May 20, 2013), 156-158.

63 Julia Petrov, "Cross-purposes: Museum Display and Material Culture," Cross Currents 62, no. 2 (14 June 2012): 219-34, doi: 10.1111/j.1939-3881.2012.00231.x (accessed May 20, 2013), 223.

64 Aileen Ribeiro, *The Art of Dress: Fashion in England and France, 1750 to 1820* (New Haven, CT: Yale University Press, 1995), 5.

65 Julia Petrov, "Cross-purposes: Museum Display and Material Culture," Cross Currents 62, no. 2, 2.

2.2 DRESSES TELL NARRATIVES: NARRATOLOGY EX

2.2.1 DEFINING NARRATOLOGY

The definition of Narratology has changed over the years; however, Tzvetan Todorov, a Franco-Bulgarian philosopher, was first to coined the term narratology in 1969. He defined narratology as the science of narrative inspired by Russian Formalist literary theorists. He emphasized the structural and logical properties of narrative in Literature Studies. He aimed to look into textual narratives and to formulate concepts or rules that apply to all narratives.[66] The definition of the term narratology has changed because the definition of narrative has changed. Theorists including Jan Christoph Meister, Jahn Manfred, Gerald Prince, Roland Barthe, and Gerard Genette points out that the study of narratives started as early as Plato in ancient Greece. In his book, the Republic 3rd volume, Plato classifies literary genres based on the term diegesis, a story told by the narrator; and mimesis, a story shown by performance.[67]

The definition that is most relevant to my practicum project is postclassical. Postclassical theorists described narratology as an investigation of literary texts in any kind of media including movies, painting, and images. Gerald Prince adds that the postclassical approach investigates the same questions as the classical approach asks of literary texts. Unlike the classical approach, the postclassical approach additionally asks: "does narrative structure relate to semiotic form? and how are narratives related to the real world and knowledge?"[68] In the scope of this practicum, postclassical approach is used in relation to the creation of a Traveling Exhibition System. Mike Bal's definition of narratology, which has postclassical aspects, asserts: "Narratology is the ensemble of theories of narratives, narrative texts, images, spectacles, events; cultural artifacts that 'tell a story.' Such a theory helps to understand, analyze, and evaluate narratives." [69]

66 Tzvetan Todorov and Arnold Weinstein, "Structural Analysis of Narrative," *Novel: A Forum on Fiction* 3, no. 1 (1969), 70, http://www.jstor.org/stable/1345003 (accessed November 6, 2012).
67 "Narratology and Structuralism," in *The Encyclopedia of Literary and Cultural Theory* (Hoboken, NJ, USA: Wiley, 2011).
68 G. Prince, "Classical and/or Postclassical Narratology," *L'Esprit Cré Ateur* 48, no. 2 (2008), 115.
69 Mieke Bal and Christine van Boheemen, *Narratology*, 3rd ed. (Toronto: University of Toronto Press, 2009), http://site.ebrary.com/lib/umanitoba/Top?id=10382167, 3.

Since narratology is analyzing narratives, it is important to understand the core element of these theories. As narratology develops so does the definition of narrative. In a more recent definition "narrative is the representation of an event or series of events."[70] Abbott uses event and action interchangeably. According to Abbott, narrative discourse and story create the narrative.[71] He describes story as event(s) and narrative discourse as representations of these events. The events could be represented in various ways. Monika Fludernik defines narrative as representation of a possible world that is either real or fictive that has temporal and spatial sense and goal directed actions.[72] Drawing from the postclassical approach, narratives may include multitudes of media as long as they have events in an order and sequence. When humans make sense of the world and things around them, they try to put the events into order. Roland Barthes was first to assert that narratives are life like,, and numberless. They are representations of events that can be found in songs, language, written language, picture, and songs.[73] Narratives are in our everyday lives. They are in chatting with a friend or making sense of our worlds. If we think about it, narratives are in our lives and our lives are narratives.

70 H. Porter Abbott, *The Cambridge Introduction to Narrative*, 2nd ed. (Cambridge ; New York: Cambridge University Press, 2008), 12.
71 Ibid.
72 Monika Fludernik, *An Introduction to Narratology* [Einführung in die Erzähltheorie.] (London ; New York: Routledge, 2009), 6.
73 Roland Barthes and Lionel Duisit, "An Introduction to the Structural Analysis of Narrative," *New Literary History* 6, no. 2 (1975), 237, 20.

2.2.2 NARRATOLOGY AND EXHIBIT STUDIES

Narratives are the core element of exhibits. Exhibit which is formed and performed by museums convey a specific narrative that is created for its audience through the arrangements of artifacts in a three dimensional and spatial display. Narrative is important to exhibition design because, as previously mentioned, narrative is how humans make sense of life. Susana Onega and Jose Angel Garcia Landa explain that "a narrative is the semiotic representation of a series of events meaningfully connected in a temporal and causal way." [74]

Since exhibitions offer cultural communication, there is a cultural pattern or cultural signs are embedded into them. If some narratives are derived from real life experiences and narratives dwell in human beings' lives, then narratives also carry cultural information. David Dernie agrees that an exhibition design is a dialogue between object, space and audience. He adds that the arrangement of objects has a direct influence on which message the curator wants to convey. He maintains that the core of the exhibit designer is to convey a story or a message to the audience.[75]

74 Susana Onega Jaén and José Angel García Landa, *Narratology: An Introduction* (London ; New York: Longman, 1996), 3.
75 David Dernie, *Exhibition Design*, American ed. (New York: W.W. Norton, 2006), 6.

2.2.3 NARRATED SPACES

Narrative as described previously contains messages and works as a communication tool. Modern exhibit studies focus on how to bring the intangible and concretize it in three dimensional space. In order to remove exhibits away from ordinary rooms full of display objects and reflect and convey messages in three dimensional space, various mediums are being used. Dernie explains that "narrative space is concerned with the contextualization of a displayed object".[76] Museum exhibits used to be arrangement of objects, text boards, and photographs. In modern exhibits three dimensional space is being used to set the background and create an ambience that speaks to human senses and provides the visitor with immersive environments, which are sensory interactions of visitor and artifact. Dernie adds that "recently, both in cultural and commercial displays, there is an emphasis on creating a storyline which evokes an emotional response as a key component of the experience. Clearly this is working from the psychology of advertising: colors, sounds and patterns of slow and fast movement play a key role to creating a memorale engagement with the object."[77]

76 Dernie, 6.
77 Ibid, 11.

2.3 SETTING THE STAGE FOR THE COSTUMES: MISE

2.3.1 DEFINING MISE-EN-SCENE

Originating from French theatre, mise-en-scène is to stage a play thinking of the whole stage production or stage setting.[78] André Veinstein spells out mise-en-scène in a broader sense as "[...] all of the resources of stage performance: decor, lighting, music and acting [...]".[79] Dennis Kennedy agrees with Veinstein description and adds that mise-en-scène includes "the spatial and temporal order of a theatrical performance" and refers to the director's job of co-ordinating all of those elements.[80] Today the term mise-en-scène is being used in both theatre and film studies.

As it can be understood from its definition mise-en-scène involves arranging actors, scenery, and lighting. As Patrice Pavis and Christine Shantz articulate, there are other elements mise-en-scène is dealing with: totality, coordination, directing of actors, projection into space, highlighting meaning and imaginary solution. As Pavis and Shantz explain, the director provides totality which is creating a harmonious work of the play.[81] Projecting the play into space is another part of mise-en-scène. As Adolphe Appia, a theatre scholar, puts it "the art of stage-directing is the art of projecting into space what the dramatist has been able to project only into time".[82] Directing of actors is director's main job. He guides the actors through the written scenario by showing them images, giving suggestions, adjusting their actions. He makes sure that the play unfolds in a coherent way.

The Director's disguised job is to highlight the meaning or emphasize the meaning of (subtext) of the scenario.[83] Constantin S. Stanislavski, Russian actor and theatre director, defines subtext as the unspoken nuance.[84] In contrast to Stanislavski, director Bertold Bretch maintains that director's job is more than watching and directing rehearsals. The director should not come with any pre-conceived notion about the whole scenario but be trying things out.[85] Kennedy's definition is perhaps the most useful to the Practicum "mise-en-scène refers to what happens in the spatio-temporal continuum, including the actions and movements of all the performers (actors, singers, or dancers) who provide the dynamic rhythm of the production."[86]

---

78 Dennis Kennedy, *The Oxford Encyclopedia of Theatre & Performance* (Oxford ; New York: Oxford University Press, 2003), 1559.
79 Ibid.
80 Ibid, 862.
81 Patrice Pavis, Marvin A. Carlson, and Christine Shantz, *Dictionary of the Theatre* [Dictionnaire du théâtre.] (Toronto, Ont.: University of Toronto Press, 1998), 469.
82 Kennedy, *The Oxford Encyclopedia of Theatre & Performance*, 234.
83 Ibid, 236-238.
84 Ibid, 236.
85 Ibid.
86 Ibid, 862.

2.3.2 MISE-EN-SCENE IN THEATRICAL SPACE

As this project focuses on the mise-en-scène in theatrical terms, we can look at deeper arrangements of mise-en-scène in the theatre. Lois Weinthal, interior design scholar, maintains that "Public interiors, regardless of their specific program, share a theater like quality where viewer and performer act interchangeably in unscripted narration, see, and seen."[87] In order to understand the relationship of artifact and viewer the framework builds upon theatrical stage properties and interactions. In theatre stage designs the background of the stage is inevitably important. Stages have images, mock-up spaces, and objects to persuade, create and visualize the scene for the viewer. In terms of prop use, Stanton B. Garner Jr., theatre scholar, argues that "The availability of objects allows the actor to claim a place in a material world, to interact with it in terms of human intention and to emerge as a physical presence in the field of performance".[88] In addition, Garner Jr. believes that the physicality of props link the body, the actor, to the stage; whereas, language and gestures gives a spirit of the play.[89] By pointing out the interaction of actors with props in the theatre play, "there must always be at least one real object [...] the function of which is to establish a contrast between its own reality and the object that are drawn".[90] Garner Jr. builds on Genet's argument that the presence of material real objects and interacting with them gives the actor a physical presence in that world.[91] He adds that the interaction between objects and actors described as "felt materiality" has great influences on the reliability of the play and scenic arrangements.[92]

87 Lois Weinthal, *Toward a New Interior: An Anthology of Interior Design Theory*, 1st ed. (New York: Princeton Architectural Press, 2011), 502.
88 Stanton B. Garner, *Bodied Spaces: Phenomenology and Performance in Contemporary Drama* (Ithaca, N.Y.: Cornell University Press, 1994), 88.
89 Ibid, 89.
90 Ibid, 88.
91 Ibid.
92 Ibid, 94.

2.3.3 MISE-EN-SCENE IN SPATIAL DESIGN

The implications of mise-en-scène in theatre and in exhibition space are similar. Lois Weinthal asserts the need to "establish a relationship between viewer and object and between viewer and viewer. Subtle dances take place as museumgoers via for optimal viewing positions."[93] A well designed exhibition space should have a harmonious and balanced blended product that should create an immersive experience or provocative sense experience to the visitor which can be achieved to gain the participation of visitors, making them a part of the narrative.[94]

Weinthal comments on making the exhibition goer or observer part of the exhibition:

> Interaction among people in public places animates interiors that, when otherwise empty, are said to be stage sets anticipating actors. The inclusion of furniture and equipment that are typically within the purview of interior designers, like props in a theatre production, are the means at hand of envisioning and constructing features that blind the body and movement to architecture and to life in public places. Making theatre out of people moving through life and public space, understanding the dramatic qualities of objects as aspects of place-making, and sensing the materials that are placed in public space are all disciplines critical to interior design practice.[95]

93 Weinthal, *Toward a New Interior: An Anthology of Interior Design Theory*, 502.
94 Herman Kossmann, Mark W. de Jong, and Kossmann.dejong, *Engaging Spaces: Exhibition Design Explored* (Amsterdam: Frame, 2010), 7.
95 Weinthal, *Toward a New Interior: An Anthology of Interior Design Theory*, 504.

To create a fully developed thought out exhibition "the creation of a tangible, literally touching experience, which stimulates not only a novel sense of scale and dimension but introduces a palpable change of perspective to the visitor and user" should be achieved.[96] It's the space that is the medium, the sense evoking part, not the message it carries.[97]

The designer's task is to translate stories and academic objectives that are often complex into a thought-provoking, spatial narrative.[98] In this sense exhibitions are not only informing people about the content but also allowing them to experience the moment of the exhibition. To achieve narrative space it is necessary to use various mediums including images, projections, maquettes by exhibition designers. According to Kossman and de Jong, a successful exhibition space should make visitors wondrous and curious as well as wanting to take part in the exhibition narrative.[99]

96 Robert Klanten and Lukas Feireiss, *Staging Space: Scenic Interiors and Spatial Experiences* (Berlin: Gestalten, 2010), 3.
97 Ibid.
98 Kossmann and de Jong, *Engaging Spaces: Exhibition Design Explored*, 7.
99 Ibid.

2.4 SYNTHESIS OF LITERATURE REVIEW

CONCEPT	THEORISTS	SUMMARY
Artifacts are culture oriented mediums	James Deetz William Rathje Michael B. Schiffer	Artifacts are signifiers of cultures because they are created by cultu oriented views and goals.
Artifacts are a mode of non-verbal communication	Ruth Finnegan Michael B. Schiffer	Artifacts speak to human senses via their tactile, olfactory and visua properties. Therefore, they offer humans emotional and unspoken experience.
Dresses communicate to people	J.B. Eicher, S.L. Evenson, and H.A. Lutz Peroni and Wolff (as cited in Finnegan)	Dress and related accessories are products of human craftsmanship speak to physical and social needs the culture. They convey informatio about cultural values, material technology, and wearer's self to the viewer.
Importance of Clothing in Exhibitions for Museums	Alexandra Palmer Suzanne Ramljak	Exhibition visitors are interested in engaging with the clothing artifacts on display because of their tactile a visual properties.
	Julia Petrov Aileen Ribeiro	Clothing artifacts evoke temporal and intimate sensorial experiences to exhibition visitors by linking them to their past as well as provide glob understanding of other cultures.
Importance of Clothing in Fashion Research	Valerie Steele Jules Prown E. McClung Fleming	Object based research on clothing artifacts, rather than written researc about fashion development, provid valuable understanding of cultural r routines and events in a society as as fashion development, materials methods.

Table 1. Synthesis of Literature Revie

CONCEPT	THEORISTS	SUMMARY
Narrative is everywhere (Post-classical approach)	Roland Barthes Mieke Bal Gerald Prince	Unlike classical approach, narratives as post-classical approach explains are numberless because they are the way people understand the world and their surroundings. Therefore, narratives take shape in various mediums from images, to songs, to cultural artifacts.
Narrative is essential part of exhibitions	David Dernie S. Onega and J.A. Garcia Landa	The curator constructs the narrative in order to convey the cultural message adequately to the visitors.
exhibitions communicate ne audience by means of arrated spaces	David Dernie Pam Locker	Narrative is an intangible message can be carried through to a 3 dimensional space by means of various mediums. Exhibitions are temporal experiences. Therefore, role of the curator is to evoke visitor's senses and emotions. This means creating contexts, spatial experiences, or providing visitor artifact engaging activities, so that visitors are a part of the narrative.
ise-en-scene is the total roduction of a theatre play	Dennis Kennedy	Mise-en-scene, rooted in theatre, is the spatial and temporal order of a theatrical performance including actions, decor, and lighting. Mise-en-scene is the materialization of text.
ise-en-scene is an pproach that can be plied to exhibition space	Dennis Kennedy	Theatre and exhibition spaces show similaries in terms of creating temporal spaces and sensorial experiences for the audience. Designing exhibition space requires a materialization of exhibition narrative, unfolding the story of the artifact in a coherent way. Therefore, mise-en-scene methods find itself in exhibition design.

CHAPTER 3

PRECEDENT STUDIES

Villa Moda, Bahrain, United Arab Emirates
Their Day, National Theatre of Czech Republic
Zalando Pop-up Store, Germany

In this chapter various precedent projects will be examined through the lens of the concepts and theories which have been discussed in an earlier chapter. The precedent projects inform the practicum project in terms of design elements, spatial attributes, theoretical relevance, programmatic features and design innovation.

3.1 VILLA MODA

Lead Designer	: Marcel Wanders
Design team	: Marcel Wanders, Karin Krautgartner, Aino Kavantera
Location	: Moda Mall, Manama, Bahrain, United Arab Emirates
Date	: 2008
Area	: 1050 m2
Client	: Sheikh Majed Al-Sabah
Category	: Clothing / Fashion Retail Store

For the visual reference please go to:
http://www.marcelwanders.com/interiors/villa-moda/

Villa Moda is located in Moda Mall which is on the main floor of the Bahrain World Trade Center. The mall accommodates 160 internationally well-known stores. Villa Moda is a Kuwait based luxury fashion department store carrying multiple famous brands.[100] The 1050 square metre store was designed by Dutch product and interior designer Marcel Wanders and his design team in 2008.The design was based on the concept of an "international souk".[101] A souk is a market in Arab countries.[102] Since Villa Moda functions as a department store, the store was designed to exhibit characteristics of a souk. From a Western perspective, Wanders used tradition and diversity, innovation, and intimacy themes to capture the essence of a souk. Wanders employed traditional Islamic architectural features, Arab culture and Bahrain's own characteristics. Wanders reflected characteristics of a souk including merchants' various stands, diverse pathways, and the display of assorted products in the market. Villa Moda carries various international brands inspired by tent like market stands in the souk. Wanders designed a variety of pavilions each representing a brand. In addition, these pavilions were planned and placed in a way that they create a variety of paths with a central space similar to the souk. Wanders employed Islamic geometric patterns in the design of the pavilions, hexagonal storefront display system, and perforated domed light sources. Islamic geometric patterns, which derive from a circle and its centre, imply infinity, equality, or justice. Islamic artists developed three essential geometric polygons which are triangle, square, and hexagon from the circle. In this sense, the hexagon symbolizes Heaven. These geometric patterns were arranged in a harmony that creates regular tessellation and implemented on various mediums.[103] The hexagonal store front display and the perforations of the domed light source are good examples of the use of Islamic patterns.

100 "About MODA Mall," Know MODA, last modified 2012, accessed April 11, 2014, http://www.modabwtc.com/

101 "Villa Moda," Interiors, accessed April 11, 2014, http://www.marcelwanders.com/interiors/villa-moda/

102 "Definition of souk in English," Oxford Dictionaries, last modified 2014, accessed April 11, 2014, http://www.oxforddictionaries.com/definition/english/souk?q=souk

103 Pattern in Islamic Art, "Background Note Number 5 : Materials and Mediums," , http://www.patterninislamicart.com/background-notes/materials-and-mediums/ (accessed 10 6, 2012).

Wanders used oversized objects throughout the store that have particular significance. Pearls are a well-known source of income in Bahrain and are represented and implemented in large scale at the store entrance to create an impression of luxury for the shoppers.[104] As Wanders recreated the souk, he reimagined Bahrain's streetscape as well. The domed light source, which is located over at the centre space, suggests an oversized streetlight. Wanders also made use of local craftsmen and local materials. For example, tiles were used to create mosaics around the stairwell and carved wood is used for railings. With regard to Islamic traditional architecture and diversity, Wanders approached Villa Moda's design by considering many aspects.

In terms of innovation, major pieces in the design were produced by employing innovative material and construction techniques. For example, the domed light source and the perforations on it were created possibly using laser cut technology. The pavilions and the perforations were also created with the same technology, but this time cutting out of sheet metal. The floral reliefs that were applied on the store's walls were created by a similar technology. Carpet patterns on the floor were custom-made as well.

Intimacy is another aspect in Villa Moda's design. The store was designed in a way that gives a sense of intimate, semi-intimate and public spatial feeling to the visitors from place to place. The spatial configuration suggests an intimate environment as if the shoppers were trying on their wardrobe at home, a semi-intimate environment evokes a small luxury fashion boutique, or a public environment that suggests branded department store environment that suggests a department store environment and branded environment for the shoppers. Wanders achieved these levels of intimacy by employing pavilion like display units, transparency of materials, the use of color and lighting systems. Wanders created a fashion store experience that meets various shoppers' expectations of the space.
This precedent was chosen due to its theoretical relevance, design elements, and spatial attributes. The next section discusses in what ways this precedent could inform the practicum project.

104 "Path of pearl," Kingdom of Bahrain Ministry of Culture, last modified 2013, accessed April 11, 2014, http://www.moc.gov.bh/en/ministry/projects/pathofpearl/#

ANALYSIS

In terms of theoretical relevance to the practicum project, Wanders' design is an example of a culturally based fashion store design. He represented and conveyed Bahrain culture through spatial design, material use and furniture choice, yet he designed for a 21st century fashion consumer. Furthermore, his design is an example of cultural communication through interior design by including non-secular, philosophical and cultural values. The TES project will benefit from Wanders view of cultural aspects, filtered through a Western lens. Since the Costume Museum hopes to mount exhibits continually, the exhibit system design should reflect Canadian cultural issues. Thus, the exhibit system can be useful for an extended period. The exhibit system will house fashion culture and should enhance but not overshadow the costumes and artifacts.

Wanders created a balanced spatial design for the store in terms of design elements. The store carries both cultural and contemporary design features in terms of line, form, furniture design, and color palette. The store exhibits contrasting design lines and forms. There are Islamic patterns and elaborated nature inspired reliefs and perforations on partitions, wall coverings, furniture, and flooring. They are in contrast with linear wall coverings, and geometric furniture designs, organic versus geometric is emphasized. For example, benches are geometric whereas table legs are organic shaped. Pavilion partitions were designed as organic shaped metal perforations; in contrast with the pavilion structures which are geometric. The color palette of the store is black, grey and white. It was a deliberate choice to let the high fashion garments take visual priority in the store. The practicum project, the TES will house a curated collection or theme that varies each time. The exhibit system will be built from a kit-of-parts with flexibility in ways of combining these parts. Drawn from this precedent project, the focus is to design an exhibit space that provides interest without dominating the clothing and artifacts providing a contrast between the objects exhibited and the exhibit system. The kit-of-parts will include both organic and geometric design lines and forms. In terms of color palette, there should be flexibility achieved by recovering or painting the parts.

In terms of spatial attributes, the Villa Moda store has varying circulation patterns, spatial volumes, and materials with a central space that leads to various paths, areas and pavilions. Semi-transparent and semi-closed pavilions also contribute in developing these alternate paths. Variation in spatial volume creates a variety of spaces, intimate, semi-intimate or public spaces. Semi-transparent and semi-closed pavilions were designed to reflect Bahrain's streetscape. In addition, there are local and international materials as well as processes were used in the design. The local mosaics and mosaic application, metal and metal works, wood and wood carving were used. Carpets, reliefs, wall coverings, and perforated domed lights were internationally sourced. The precedent informs the practicum project in terms of the use of spatial volumes and materials. The Villa Moda demonstrates that volume differences in space and size of furniture creates excitement, focal points, mystery, and calm to the space. The TES needs to be supported by artifact displays and interior design to convey the senses. The TES has to be cost effective and environmentally sustainable; therefore, materials are sourced mainly from Manitoba.





Production	: National Theatre of Czech Repu
Author	: Josef Topol
Director	: Otomar Krejca
Scenographer	: Josef Svoboda
Place	: Tyl Theatre, Prague
Played on	: October 1959
Category	: A theatre play





Their Day (Jejich den in Czech) is a play written by Josef Topol that was staged by the National Theatre of the Czech Republic in 1959. Their Day analyzes 'aspirations and disenchantments of youth in the late 1950s'.[105] Josef Svoboda, an architect and scenographer, was hired to design the scenography for the play. Svoboda had done many scenographic designs for the theatre and opera sets as well as exhibits. In all his designs, Svoboda's concept for his stage designs was that they should always have a quality of movement or evolution. This quality could be represented by a physical movement or a dynamic setting that expresses evolving relationships or events during the course of a play.[106] The scenography for Their Day integrated Svoboda's two previous sets' techniques. The techniques he used in previous sets were named after the shows they were designed for. The first show was Polyekran, which employed only projection onto fixed screens. The second show was Laterna Magika, which used a mixed medium involving movie projections on movable screens and live actors on the stage and projected on screens. The commonality of these two plays was the projections on screens in a simultaneous and rhythmic manner. The main idea behind integrating projections into the scenography was to enrich the theatre stage or theatre production by means of film use. Polyekran was a collage of films and images only, whereas Laterna Magika involved a combination of live performances by actors as well as the projection of films and images. In addition, Polyekran was performed with stereophonic sound while Laterna Magika consisted of silent performances and film projections.[107]

105 Jarka Burian, *The Scenography of Josef Svoboda*, ed. (Middletown, Conn.: Wesleyan University Press, 1971), 197, [5].
106 Dieter W. Kaisenberg et al., The Designs of Josef Svoboda (Glendale, California: KaiDib Films International, 1973).
107 Burian, *The Scenography of Josef Svoboda*, 197, [5]

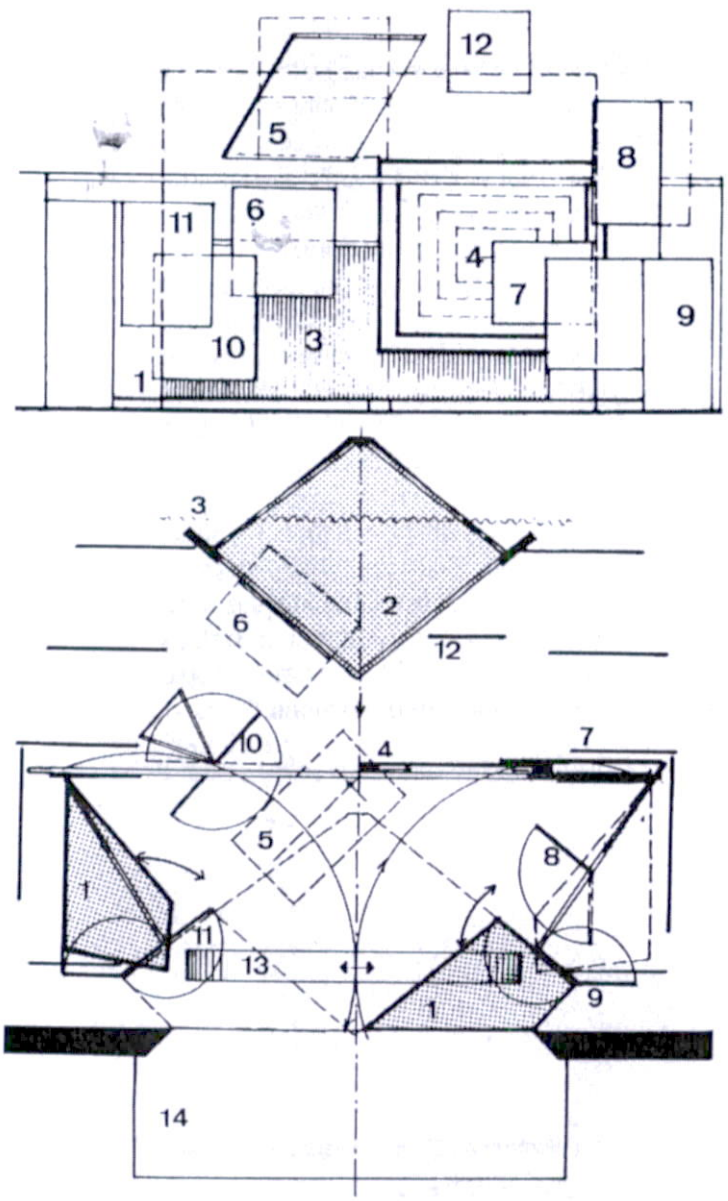


Figure 19. Their Day stage plan

Their Day is a hybrid of Polyekran and Later Magika set techniques. In Their Day, Svobo aimed to use the techniques in a traditional theat play. Like Polyekran, Their Day used nine scree (number 3, 4, 5, 6, 7, 8, 10, 11, 12) were sprea out in the space on various planes and there we two projections assigned to each screen. Numb 3 was a black velvet curtain, number 4 was a fo sided shutter curtain, number 5 and 6 were scree can be rotated on a horizontal axis, number 7 wa a screen that could be moved across the stag number 8, 10 and 11 were screens that cou be rotated on their vertical axes, number 9 wa a screen that could be folded on its vertical axi lastly number 12 was a free hanging projectio screen. Numbers 1 and 2 were movable stage In order to absorb the sound of moving playe on the stage and stage light, the stage floor wa covered with 5 mm thick black felt. Also, to preve any unwanted shadows over the projectio screens a shadow area between the actors an the screens was created. Their Day also use Laterna Magika techniques, including mime danc and movable screens. Their Day differs from thes two techniques by staging a more conventiona theatre play performance.[108]

108 Ibid.

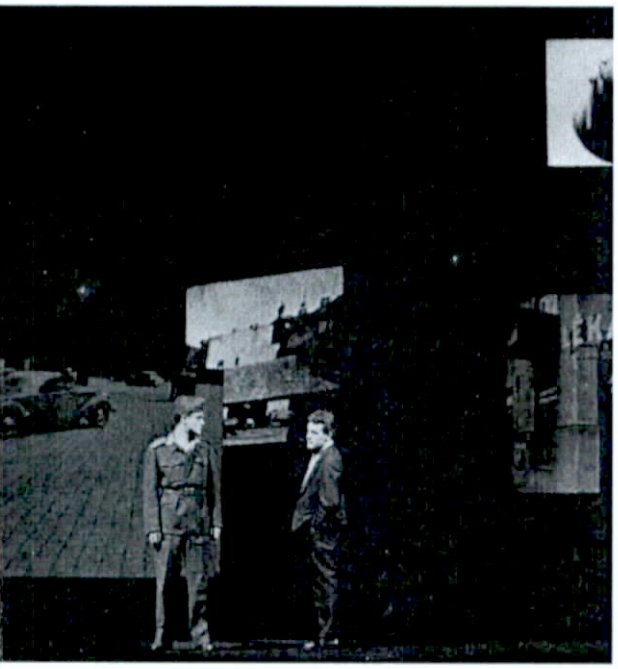


Figure 20: Projections are used to create the milieu

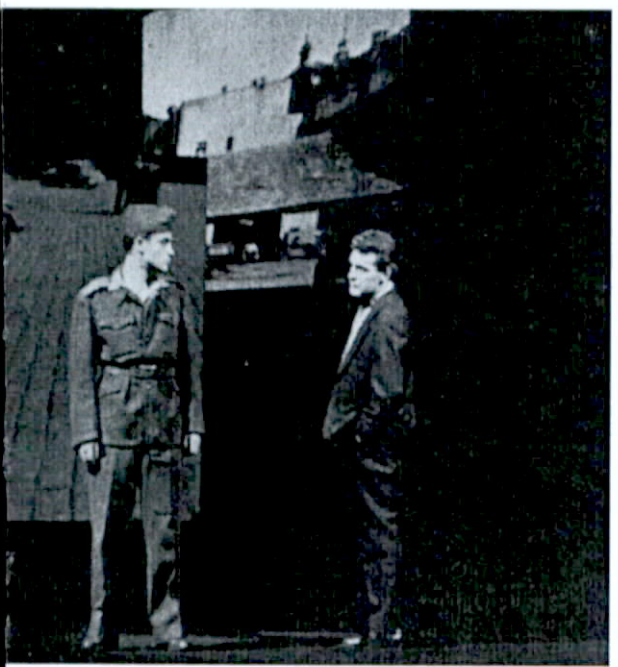


Figure 21: Projections are used to create the milieu

Svoboda explains the philosophy behind the technique in Their Day:

> We do not want to do away with traditional painted or plastic scenery and substitute scenery created by lighting an idea that is not in any case a new one. But we want to attempt composing individual, separate, and distinctive visual perceptions into a new total image according to a given theme: to convey a given intention by a composition of images, their interrelationship, their temporal and spatial rhythm.[109]

Svoboda explains that he used projections because the theatre play demonstrates city life. If we consider city life, it is vibrant, ever changing, consisting of small fragments that make a whole city. Svoboda did not want to use décor to set up a localized version of the city. The Polyekran and Laterna Magika techniques created Their Day rapid scene changes and added dimensions of space to the theatre stage. This precedent was chosen for its theoretical relevance in terms of narratology and mise-en-scène and design innovation in terms of how to establish a background.

109 Ibid, 93.



ANALYSIS

This precedent will inform the practicum project in terms of its use of narratology and mise-en scene in a three dimensional space. Narratology looks at narrative structural theories as well as the ways of narrative telling. Their Day's scenographic design was distinguished among Svoboda's previous works because he implemented his previous techniques on a conventional theatre play for the first time. But also, Svoboda succeeded in contrasting virtual mediums and real mediums in storytelling. In Their Day, life, movement, and activity were well represented by Svoboda's dynamic scenographic design. The practicum project will benefit from the story telling mediums that Svoboda used for his set designs. The exhibit system will house fashion artifacts and accommodate visitors to the exhibit. In order to convey stories of fashion artifacts, multimedia and interactive elements will be used to supplement the showcases. This precedent also provides a good example of the creative use of mise-en-scène. As discussed in an earlier chapter, mise-en-scène is a complete frame that includes actors, light, sound and text. As seen on Figure 10, mise-en-scène was created with multiple mediums including actors' performances, projections, and theatre props. If we consider exhibit space as an empty theatre stage, the artifacts are theatre props that fill in and tell the story.

The way people engage with objects in an exhibit is similar to the way actors interact with props and space in a theatre play. In an exhibit space people gaze at each other and objects. This whole atmosphere is a mise-en-scène. The practicum project will benefit from this aspect of Svoboda's design. In terms of design innovation, Their Day utilized new techniques that are movable projections and movable stages. In order to create its own mise-en-scène, the Traveling Exhibition System (TES) will utilize display systems and platforms as well as lighting, projections, didactic panels, and hands-on activities.



3.3 ZALANDO POP UP STOR

Designer : Sigurd Larsen
Client : Zalando Collection
Location : Mitte, Berlin / Germany
Date : March 1st, 2012
Category : Furniture Design / Pop-up Retail Store



Berlin-based electronic commerce company Zalando traditionally sells fashion collections of various brands. Before its first collection 'Zalando Collection' hit its websites, the company wanted to stage the collection to the public for a physical experience. For this three day long experience, the client commissioned Sigurd Larsen, a Berlin based Danish architect, to design the pop-up store. The preview of the collection was on March 1st, 2012.[110] For this special event, an empty gallery space was leased in Mitte which is a borough of Berlin. The space demonstrated an industrial spatial quality with its exposed concrete walls, polished concrete floor, and exposed ventilation pipes on the ceiling.

Larsen was inspired by shipping crates for the pop-up store installations. It appears that he thought of crates in response to packaging that e-commerce companies use for shipping, the project programming and spatial features of the leased space. Later in a magazine interview he added that "we were interested in working with free standing objects that later could be reinstalled somewhere."[111] Larsen designed four pieces of installations for the pop-up store.

10 Agency News Overview, "Häberlein & Mauerer Welcomes Two Fashion Clients in Berlin ," *Häberlein & Mauerer,* Accessed from http://www.haebmau.de/en/Corporate-Website/News/Agency-News/haeberlein-mauerer-welcomes-two-fashion-clients-in-Berlin, Accessed on April 13, 2014.

11 News, "Zalando Pop-Up Shop," *Frame Magazine,* Accessed from http://www.frameweb.com/news/zalando-pop-up-shop, Accessed on April 13, 2014.

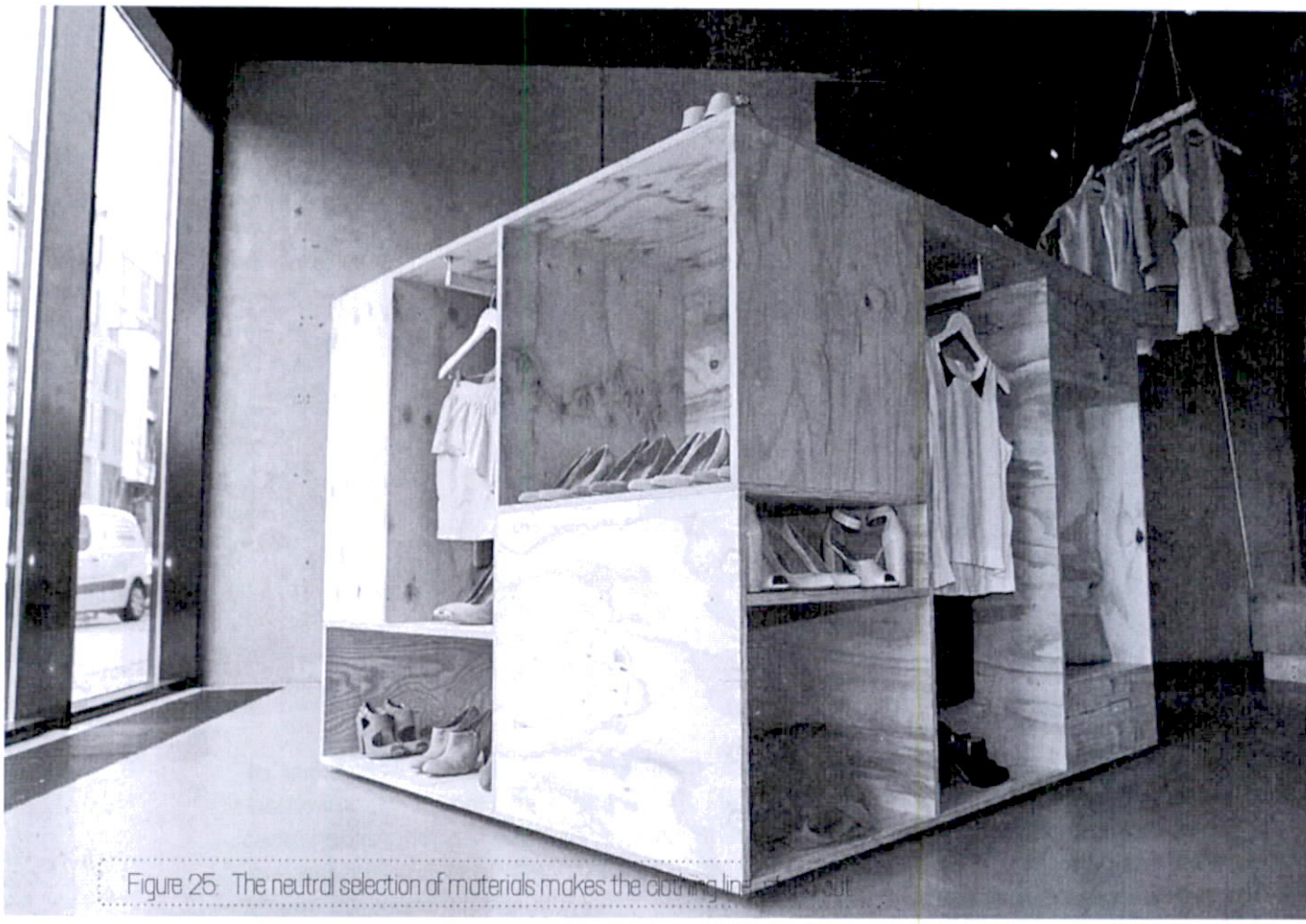
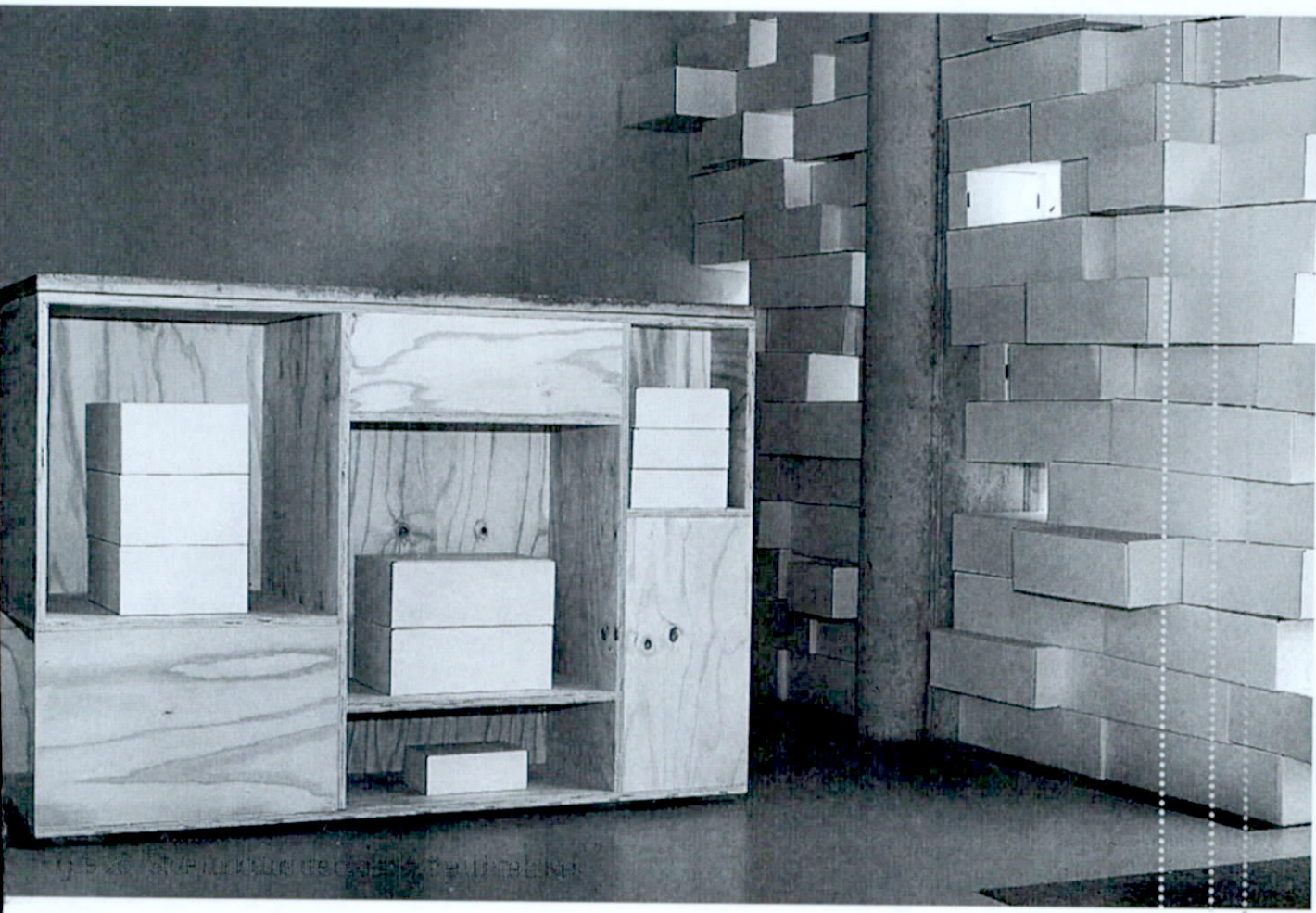


Figure 25. The neutral selection of materials makes the clothing line stand out

Three pieces were free standing and mobile installations that staged the collection and a stool which ha
concrete and wood materiality served as a counterweight for the hangers in order to hang the clothing item
Larsen's design addressed five design elements which are form, materiality, display, mobility, and brandin
for Zalando's pop-up store. From design perspective, Larsen came up with a form for each installation tha
demonstrated a contrast in the ratio of void and filled spaces. It seems that at the beginning he envisage
these three installations as solid crates that differ in size. Then, he designed cut-outs which were varyin
in size and depth on the four sides of each installation. Therefore, he aimed to accommodate the clothing
shoes and handbags for the display. Eventually, the design outcome catered for aesthetic and function
requirements of the project. As mentioned previously, the leased space carried an industrial atmospher
with a mixture of concrete and metal materiality. Larsen responded to this environment by choosing woo
material for the installations that resulted in light color, smooth texture, and slender design. The final desig
added warmth to the leased space as well as set a neutral background for the collection. The use of woo
material also went back to shipping crate design concept.



Since the purpose of the project was staging Zalando Collection, display was another key feature of Larsen's design. Larsen used four sides of each installation that visually suggest four different vitrine configurations that showcase the collection. Moreover, it appears that lightweight materiality selection and modular design of the installation enabled reuse of the installations for other events and venues. In terms of mobility, Larsen used casters to move the installations in the space. This feature allowed different layout configurations in the space as well as practical ease to move them around. This feature brings us back to the shipping crate concept. As mentioned earlier, internet commerce company Zalando provides fashion items on its website and ships out the merchandise to its customers. In response to branding, Larsen came up with an idea of piling up white Zalando boxes to cover the storefront. He arranged to take the white boxes out day by day previous to the preview of the collection. Larsen's purposes were likely to refer back to Zalando's brand and its operation such as a warehouse environment as well as to create a curiosity among the community in Mitte. Overall, branding was embedded in the design and practices.

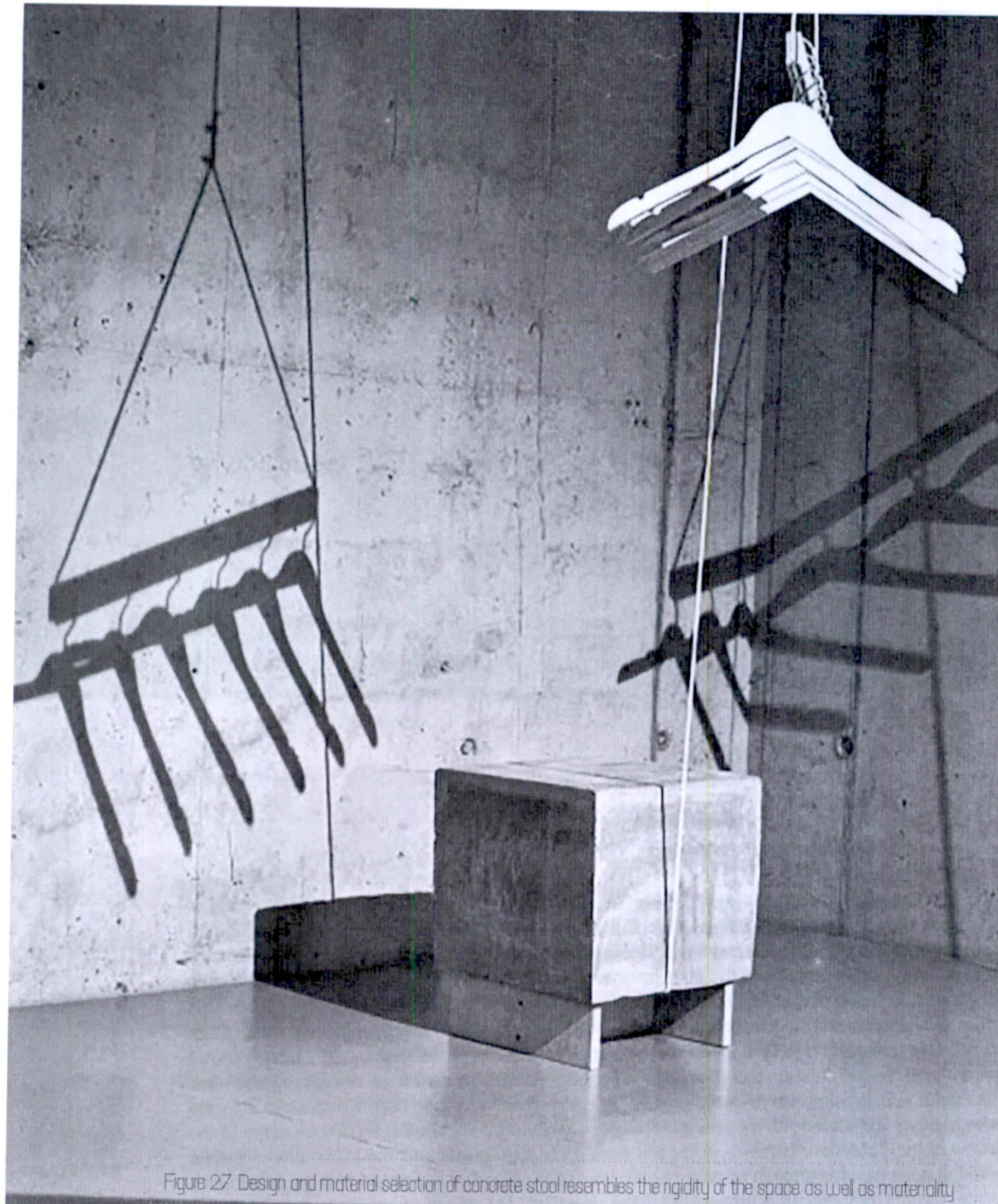


Figure 27 Design and material selection of concrete stool resembles the rigidity of the space as well as materiality

ANALYSIS

This project was chosen because of its relevance to the practicum project in terms of programmatic features, design elements, and spatial attributes. The pop-up store's design programme called for a design that was easily built up on the site, was transported to the location as well as moved around the space, could be reassembled for other events, addressed the visual and tactile sensual experience of the visitors. As a result, Larsen's pop-up store design concept and solution overlapped with the practicum project requirements.

Traveling Exhibition System (TES) will benefit from Larsen's conceptual thinking as well as practical solution to the project. In particular, Larsen achieved to design a portable display unit that served to immediate and temporary need of the client. Because the TES is required to be flexible, easy to assemble and transportable, Larsen's design offers a simple and functional solution. In addition, Larsen introduced branding to his design in a way to give a total experience for the visitor by white boxes and warehouse like interior environment. TES will benefit from this concept by introducing materiality in the exhibition system such as employing various fabric types as well as clothing related fastening options such as zipper, velcro and press stud. Another way to embedding the concept is to have activities related to clothing in the exhibition space. In terms of design elements, Larsen's design offers a simple, functional and elegant solution.





Figure 28: Zalando Pop-up Store interior

In particular, TES will benefit from installations' cut-out height, width and depth relations in order to accommodate multiple functions. In relation to the spatial attributes, pop-up store installations form a transition between high ceiling of the leased space and human scale. In relation to the practicum project, the exhibition site is in Polo Park Shopping Center's atrium which receives a large amount of natural light from its high ceiling in as well as providing a focal point for the shoppers. Therefore the Traveling Exhibition System will provide a space in relation to human scale and to the atrium space.

CHAPTER 4

DESIGN PROGRAMMING

Project Definition and Project Goals
Site Analysis
Client and User Profiles
Spatial Requirements
Functional and Aesthetic Requirements
Technology Requirements

4.1 PROJECT GOALS AND PROJECT DEFINITION

PROJECT GOALS

This project hopes to benefit the client by creating a financial solution as well as contribute to Manitoban community by informing young individuals and revitalizing community's historical memories and information about fashion history and culture. The overarching goals of this project can be grouped into organizational goals, form and image goals, function goals and economic goals. Project goals will set limitations that need to be considered in order to create a better design for this project. The CMC's overall organizational goal is to maintain and exhibit its collection for national and international audiences. Due to museum's some major financial obstacles, the collection is currently stored in the Millennium Center in downtown Winnipeg with no gallery space. For the future, the museum administration is hoping to raise money to move the collection to a better place for conservation purposes as well as to have a permanent gallery space for its exhibitions. The practicum project hopes to assist the museum to meet its objectives. Especially, the practicum project will provide a portable system that can be reused and reconfigured according to each venue. Considering the museum will require small entry fee for its exhibitions, it will reach its financial goals in the nearest future and it will be likely to reach its organizational goals by having a permanent space in the furthest future.

The form and image goal of the project is to design a kit-of-parts which will allow the assembly of several configurations of exhibit system. The system will combine neutrality and contemporaneity. The exhibit system will house the museum's collection that should not be overshadowed by the eccentric architectural features of the design. In this respect, simple form and neutral materials will be achieved, so that the exhibit will stay independent from its context. However, there will be cultural and contextual implications because this exhibit represents the Costume Museum of Canada by staging Canadian fashion culture. Furthermore, the exhibit system will be used repeatedly and therefore, it needs to be flexible and simply designed. Contemporaneity will be a key element for this project. In order to meet functional goals, the exhibit system will accommodate an entry and exit, learning and exploring functions, and engaging with the fashion. The kit-of-parts will succeed to stage different elements of the exhibition in a specific but unified design language. In terms of economic goals, even though there is no specific project budget, initial costs to manufacture the kit of parts are as important as long-range operating costs. Thus, the materials and construction method will be carefully chosen to be economical, environmentally sustainable, robust and to allow easy assembly and reuse. The kit-of-parts more likely will be used in many different ways and for a long period of time.

PROJECT DEFINITION

The design program is for a travelling exhibit system (TES) for the Costume Museum of Canada. The museum has a vast collection of fashion items including clothing, hats, gloves, fur and jewellery. The program is based on designing an exhibit of Manitoban weddings consisting of a multifunctional kit-of-parts that can accommodate various alternate exhibitions. Another consideration is the volunteer work-force that will construct the exhibition. The museum maintains volunteers for unpacking, dressing, undressing, packing, and transporting collections to the arranged exhibition venues. The volunteers are of varying age, physical condition, and skill level. This practicum project proposes Traveling Exhibition System (TES) consists of kit-of-parts and can be built on the site and only interior spaces.

TRAVELING EXHIBITION SYSTEM (TES)

Traveling Exhibition System (TES) are of kit-of –parts which can be assembled on a site that offers stable, functional, reuse and flexible solutions to exhibitions of Costume Museum of Canada. Kit-of-parts is an assemblage of building components that are prefabricated and designed to be fit together in various ways (Howe, Ishii, and Yoshida 165). The main features of these components are that they can be easily assembled, can be used repeatedly, and are easy to manufacture. According to Howe et. al, kit of part systems can be designed as joint based, panel based, and module based (Howe, Ishii, and Yoshida 165).[112] The materials that are used to manufacture kit-of-parts range from metal, plastic to pre-cast concrete. Joint based systems are pre-cut parts that are assembled on the site. Panel based systems are components that include structure or wall; floor or deck parts.[113] (Howe, Ishii, and Yoshida 167). The practicum project utilizes a joint based system that requires less skill in assembling an exhibit, flexible and ease in manufacturing protects the garments and secures them, enables electrical connection.

112 Alan S. Howe, Isamu Ishii, and Tomohiro Yoshida, "Kit-of-Parts: A Review of Object-Oriented Construction Techniques" 1999).
113 Ibid.

4.2 SITE ANALYSIS

4.2.1 SITE CONTEXT



One of the aims of this project is to reach as many individuals as possible in Winnipeg that vary in gender, age, and cultural background for education as well as to raise and to reach possible donors for the museum. The public space is selected in terms of intensity of foot traffic during a 18 hour period. Moreover, the duration of time that individuals spend time in that place is the next criteria. According to Traveling Activity and Motivation Survey (TAMS) 2006 Canada statistics, Canadians who are culture and entertainment pursuits frequently spend their leisure time for shopping and dining when they do not travel represents 93.2%.[114] From this statistics it can be drawn that shopping and dining is the most popular leisure past time among Canadians.

---

114 Statistics Canada, "Canadian Activity Profile: Shopping and Dining While on Trips,", 2006, 8-9.

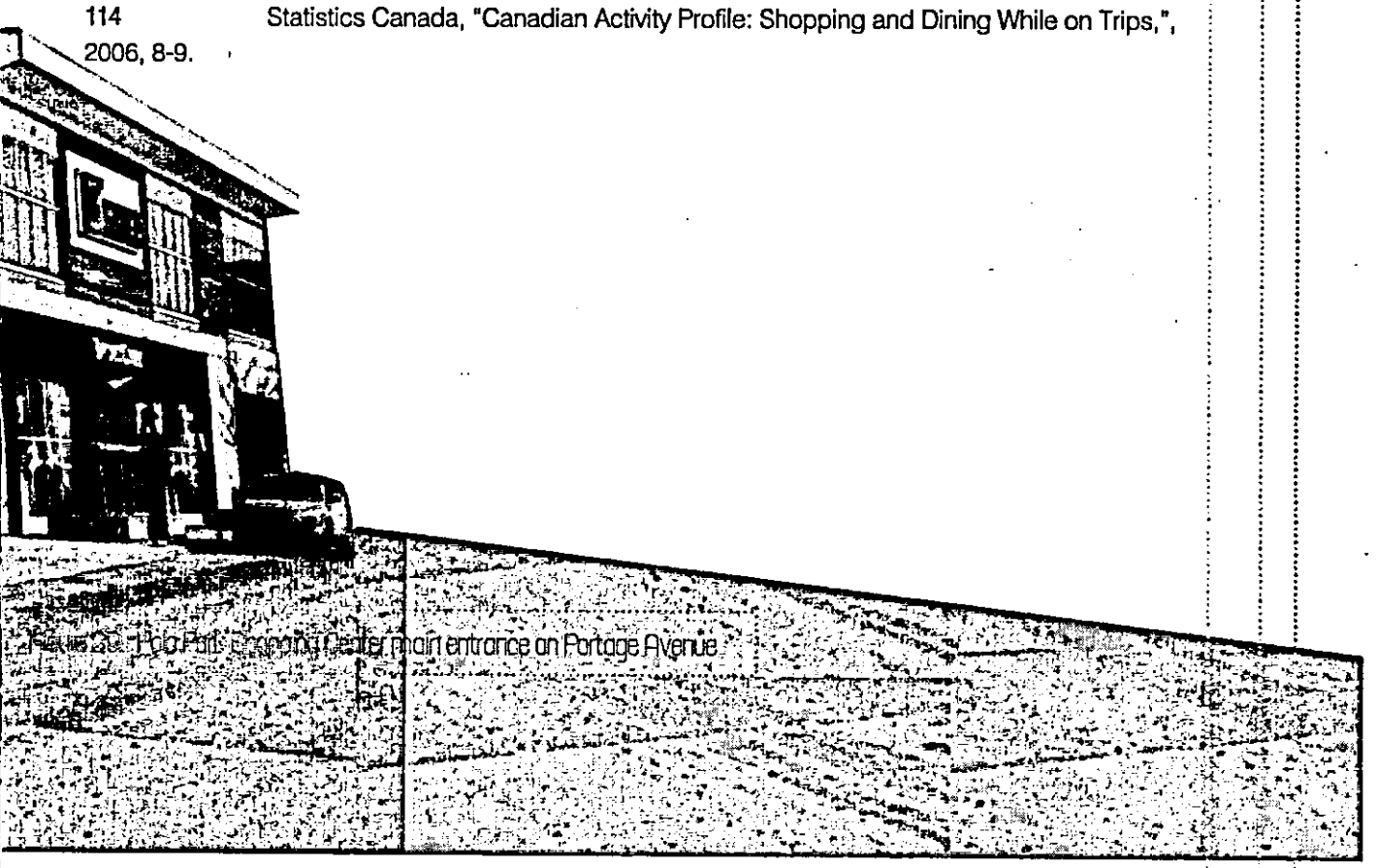


Figure 20: Food Court Shopping Center main entrance on Portage Avenue

4.2.1.1 NEIGHBOURHOOD AND LANDMARK

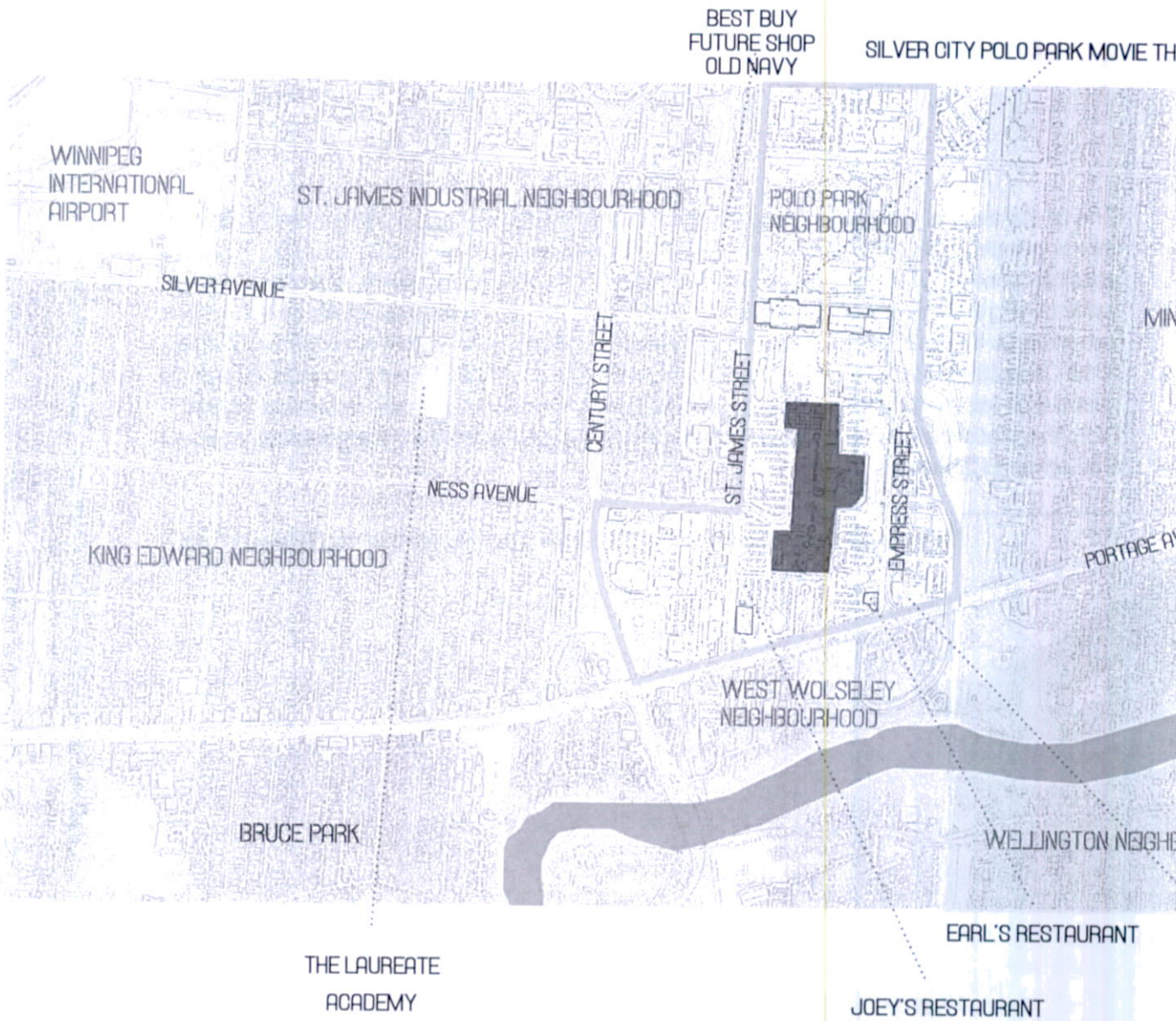
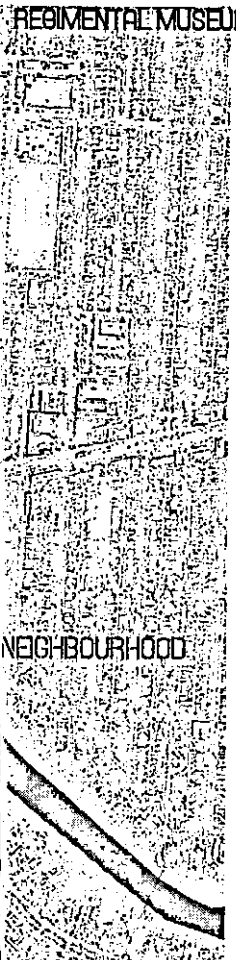


Figure 30: Neighbourhood and Landmark Map

OL

ROYAL WINNIPEG RIFLES
REGIMENTAL MUSEUM



4.2.1.2 CIRCULATION



Figure 31: Circulation Map

NUE

4.2.1.3 MODES OF TRANSPORTATION



Figure 32: Transportation Map





4.2.1 BUILDING ANALYSIS

The selected site is located in Polo Park Neighborhood, west downtown Winnipeg, Manitoba. Polo Park gets its name from Polo Park Racetrack horse racing facility that existed from 1925 to 1956 at current Polo Park shopping centre site. Polo Park neighborhood spans from Portage Avenue on the south, St. James Street on the east, Ellice Avenue on the north, and Canadian Pacific Railway on the east. The neighborhood is surrounded by wholesale stores, outlet stores, restaurants, furniture stores, and electronics stores. Moreover, the neighborhood provides Winnipeg community dining, shopping and entertainment options by Polo Park Shopping Centre and its facilities.

Polo Park Shopping Centre is a complex that covers 60 acre area with the shopping mall, Earls, Joey's, Pier1Imports, Silver City movie theatre, parking lots, and bus shelters. The shopping centre complex is at the intersection of St. James Street and Portage Avenue. The location is west downtown area in Winnipeg which is ten minutes away from James Armstrong Richardson International Airport and eight minutes away from downtown Winnipeg. It is located at 1485 Portage Avenue. Today the shopping centre covers 1.3 million square feet with two hundred retail stores, dining options, movie theatre, and bowling centre. Polo Park is the largest shopping center in Winnipeg and the only supermall between Calgary and Toronto. The site offers 5,600 parking spaces and bus shelters. The shopping centre was the first enclosed shopping centre in Winnipeg when the roof was installed in 1963.

4.2.2 EXHIBITION SPACE ANALYSIS

The allocated space should meet some basic structural requirements in terms of column pattern, maximum load that the floor can carry, and height of the ceiling. The column pattern of the building is important to determine the available space and type of exhibit system to be built. In addition, the ceiling height of the building is another factor to consider. Electrical systems are another important factor for the TES. The location of power should be convenient because the exhibit system will utilize lights, projection machines, ventilation systems as well as electronic moveable display and platform systems.
Polo Park has an allocated space for events year around as well as community fund raising. The space is located on the main floor in front of vertical circulation area. The size of the space is 14.7 meter by 6.3 meter, total area of 92.61 m2.

4.3 CLIENT AND USER PROFILES

4.3.1 CLIENT PROFILE

STAGING AN EXHIBITION: CURRENT NEEDS OF THE CMC

Local traveling exhibits have been quite limited in scope in 2011; but the CMC staged a number of shows. The largest exhibit was Open Doors at the Manitoba Museum; they also staged a one night sampler exhibit, which displayed 8 dresses from The Little Black Dress for a gala fund raiser for the Winnipeg Art Gallery. The Open Doors show required bendable mannequins and 8 costumes with accessories. The WAG gala required only simple dress forms on a stand. The mannequins were transported in large water proof zippered sacks or transport bags. The costumes are wrapped in acid free material such as, tissue, mylar and/or polyethylene; then placed either in the curatorial boxes or transport bags. All the items are taken to the specific location by volunteer and board members' car. Setting up and tearing down is undertaken by volunteers. In handling of the garments, white gloves are required. One of the biggest problems in public locations is security of the costumes. The CMC no longer have any exhibit cases to protect the garments. The ones the CMC did have were not suitable for traveling.

ORGANIZATIONAL AND SOCIAL STRUCTURES OF THE CMC

The CMC moved to Winnipeg on June 12th, 2007 from Dugald Manitoba to 106 Pacific Avenue Winnipeg Manitoba. The museum spent three years in its space on Pacific Avenue. There were five exhibits staged every year. New fashion artifacts from the University of Manitoba and other sources were acquired. After the museum closed its doors in 2010, the administration staff was dispersed. Currently, there is a principal, secretary, and treasurer working in the museum and they acquire volunteers as needed from event to event.

4.3.2 USER PROFILE

The exhibit in Polo Park Shopping Center is expected to attract a variety of users: predominantly female with educational groups such as, in textile studies, fashion design, costume design, theatre and stage design, high school students, elementary students; subject specialists such as, in culture studies, curators, exhibit designers, museum experts; national and international audiences; individuals; and couples. Potential users of the exhibition space can be categorized into three groups; primary users, secondary users, and tertiary users.

	DEFINITION	VALUES	PSYCHOLOGICAL NEE
PRIMARY USER PROFILE	The primary group is women who are from Winnipeg, living in Winnipeg or visiting Winnipeg. This group has mainly Canadian affiliations and want to learn or revisit Canadian culture. There will be also curators, designers, or art related professionals. Visitors will range in age from 30 to 80. Frequency: On weekdays from opening time to closing time (9am to 9pm) of the exhibition. On weekends from opening to closing time (12pm to 6pm).	Being nostalgic and feeling connected to Canadian culture. Therefore, they like to revisit their Canadian cultural background. Visual representation in the exhibition is very important. Seek for a learning and entertainment experience. Intereterested in visual and tactile properties of clothing. Interested in cultural, economical, and social development of women status and how it is reflected upon fashion.	Visual comfort to gaze display objects, texts, images. Easily navigate thems in the exhibition space Ease of access to the exhibition space. Ease of moving aroun the space. Security of the exhibiti space in case of fire a structural stability.
SECONDARY USER PROFILE	The secondary user group is couples and couples with children. Visitors will range in age of 7 to 60. Frequency: On weekdays from opening time to closing time (9am to 9pm) of the exhibition. On weekends from opening to closing time (12pm to 6pm).	Value and engage in family activities. Value their culture and community, eager to teach their nostalgic and passionate cultural feelings to their children and show their support to the community as much as possible. They are interested in sports and entertainment activities such as movie, theatre, and family outings. They are excited to socialize and less interested in simplicity in their lives.	
TERTIARY USER PROFILE	The tertiary user group is volunteers and the staff. Tertiary group will be in age range of 30 to 60. Frequency: Volunteers and the CMC staff will come once for building the exhibition and once for dismantling the exhibition. Two CMC staff will be in the exhibition space during opening and closing times.	Having nostalgic affiliation with the museum. Value their culture and community and take part of the events when there is a chance. Excited about socializing and meeting with new people. Being interested in fashion and history.	Comfortable collaborati environment with fell volunteers. Being fully informed abo exhibition details (e place, time, work load).

Table 2: User Profiles

USER ACTIVITIES	SENSORY NEEDS	PHYSICAL NEEDS
Buying ticket to the exhibition. Reading didactic panels and artifact tags. Gazing at the clothing artifacts. Gazing at the projected images. Walking around the exhibition space by following the exhibition narrative. Talking to each other about their experience as they stand by the display case. Engaging with the replicated clothing artifacts by touching and trying them on.	Sight; be able to see artifacts, didactic panels, and projections clearly, no visual obstacles or disturbance. Touch; to engage with the replicated clothing in order to experience tactile and visual properties of the fabric. Hearing; to be able to comprehend audiovisual projections in the exhibition. Smell; to have access to ventilated air. Temperature; to be able to circulate in the exhibition space comfortably without exposed to accessive heat (e.g. lighting and exhalation) and extreme cold (e.g. overrunning air conditioner).	Optimal ambient lighting in the space to avoid stumbling or losing balance as walking in the space. Optimal display lighting to catch the full color and details of the clothing. Optimal ambient lighting before leaving the exhibition to adjust the eye for the outside. Adequate ceiling height to avoid claustrophobic feeling. Fire and structural safety of the exhibition space. Adequate space to wonder around the display cases.
n addition to user activities noted n primary user profile, nteracting with fabric and related materials by making crafts, in other words learning by making. Talking and making crafts together vith other families and children.	In addition to sensory needs noted in primary user profile, Sight; to be able to make crafts comfortably by the dedicated area.	In addition to physical needs noted in primary user profile, Adequate space to sit, stand, and work during craft making. Adequate height and space for each user to work on.
essing up the mannequins for the hibition. ilding and dismantling the exhibition luding structure and exhibition furniture. ening and closing the exhibition space. ling tickets at the entrance. sisting visitors if they have any question difficulty of walking around the space. tching the occupancy load in the space. ading the visitors to the exits in case of emergency as well as first involvement ire incidents. tching for possible exhibition security blems	Sight; to be able to see visitors in the space and coming into the space. Hear; to be able to hear visitor's call for assistance. Smell; to have access to ventilated air. Temperature; to be able to stay in the exhibition space comfortably without exposed to accessive heat (e.g. lighting and exhalation) and extreme cold (e.g. overrunning air conditioner).	Ticket desk and stool for selling exhibition entry tickets. Secure storage space to store their personal belongings. Adequate space to stand and walk around the exhibition space for assistance.

4.4 SPATIAL REQUIREMENTS FOR "MANITOBAN WE

DISPLAY SIZE	ACTIVITIES / ACTIONS	SPATIAL CHARACTER / VISUAL CONCEPT
ENTRANCE	Entrance has visual importance. It is the first place to attract visitors.	A brief scene about the exhibition so that visitors will have glance at the exhibition. Mise-en-scene arrangement with dramatic lighted scene that forms a visual narrative.
TICKET & INFORMATION DESK AND NARRATIVE PART I	Visitors buy tickets and enter the exhibition. Visitors are introduced to displayed artifacts, are reading didactic panels and projection from a Manitoban Wedding.	Ticket desk and staff with bright lighting. Adequate space to let visitors line up to buy their tickets. Projection and dramatic lighting around the narrative part1. Didactic panels
EXHIBITION NARRATIVE PART II	Visitors gaze at the display objects, getting close to the artifacts, walking around, taking a moment to look, read didactic panels and watch projections.	Ambient lighting is dimmed and lighting is enhanced around the artifacts. Neutral, elegant and stylish space
EXHIBITION NARRATIVE PART III	People walk around the mannequins, looking closely to the details of the clothing and textiles. Taking their time to look around, watch projection that is projected on to the perimeter curtains.	Romantic space created with dramatic lighting, projections.
HANDS-ON INSTALLATION	People are making small souvenirs to take home. For example, visitors are making wedding favors using paper and cloth materials. Visitors are gathered around a desk making, talking, looking at each other's work.	Family and adult entertainment Lit space Semi-closed or defined environment Adequate space for standing around the desk
INTERACTIVE INSTALLATION	There are mock-up half vintage clothing items people can step in and look themselves in the mirror.	Family and adult entertainment Lit space and with projections Adequate space for line-up and waiting
EXIT	People are exiting the exhibition	Well-lit Way out to the shopping mall

Table 3: Spatial Requirements for "Manitoban Weddings Exhibition"

HIBITION"

FURNITURE, FIXTURES, AND EQUIPMENT REQUIREMENTS	SIZE
Exhibition banner (Quantity: 1) Spot lights for the banners (Quantity: 2) Spot lights for the scene (Quantity: 2) Mannequins (Quantity: 1 female and 1 male adult) Background curtain (Quantity: 1) Dividing curtain for the scene (Quantity: 1)	10%
Ticket desk and stool (Quantity: 1 each) Ambient spot lighting (Quantity: 4) Projector (Quantity: 1) Didactic Panels (Quantity: 5) Display System (Quantity: 1)	15%
Projector (Quantity: 2) Display System (Quantity: 2) Stand audio speakers (Quantity: 2) Projector (Quantity: 2) Portable air-conditioner (Quantity:1) Ambient spot lighting (Quantity: 6) Fire Safety Box (Quantity: 1)	20%
Display System (Quantity: 2) Projector (Quantity: 2) Ambient spot lighting (Quantity: 6) Fire Safety Box (Quantity: 1)	30%
Desk (Quantity: 1, for 10 people capacity) Stool (Quantity: 8) Garbage bin (Quantity: 2) Storage bin (Quantity: 1) Curtain divider (Quantity:1) Spot lighting for the work space (Quantity: 4)	10%
Mirror (Quantity: 3) Half acrylic torso forms (Quantity: 3) Projector: (Quantity:1)	10%
Swing GateTurnstile (Quantity: 2)	5%

4.5 SPATIAL_PLANNING

CONCEPT	THEORISTS	SUMMARY	SPATIAL IMPLICATIONS
Clothing artifacts communicate to people	Ruth Finnegan Michael B. Schiffer J.B. Eicher, S.L. Evenson, and H.A. Lutz	Dress and related accessories are products of human craftsmanship and speak to physical and social needs of the culture. They convey information about cultural values, material technology, and wearer's self to the viewer.	Exhibition design is focu on artifacts rather than spa Therefore, exhibition space calls a neutral, minimalistic design an elegant touch of materials. The curator ensembles artifacts create a context for artifacts such era, time, culture, and geograph Exhibition displays are interac areas where the past and pres identities comingles Multilevel information is presen including written, tactile, visual, a audio information Hands-on installation and interactive installation increases t engagement with clothing
Narrative is everywhere	Roland Barthes Mieke Bal Gerald Prince S. Onega and J.A. Garcia Landa	Post-classical narratology approach explains that narratives are numberless because they are the way people understand the world and their surroundings. Therefore, narratives take shape in various mediums from images, to songs, to cultural artifacts. Narrative is an intangible message can be carried through to a 3 dimensional space by means of various mediums.	Images, didactic panels and projection to complement artifactual story telling. Exhibition spatial arrangements layout 1, 2, 3, and 4 unfolds a narrative Curator arranges the objects in a way to convey the message
Mise-en-scene is the total production	Dennis Kennedy	Theatre and exhibition spaces show similaries in terms of creating temporal spaces and sensorial experiences for the audience. Designing exhibition space requires a materialization of exhibition narrative, unfolding the story of the artifact in a coherent way. Therefore, mise-en-scene methods find itself in exhibition design.	At the exhibition entrance mannequins bride and groom are greeting the visitors Dramatical lighting and projection Order of objects in display cases Spatial arrangement Audience flow in the space

Table 4 Synthesis of Literature Review and Spatial Implications

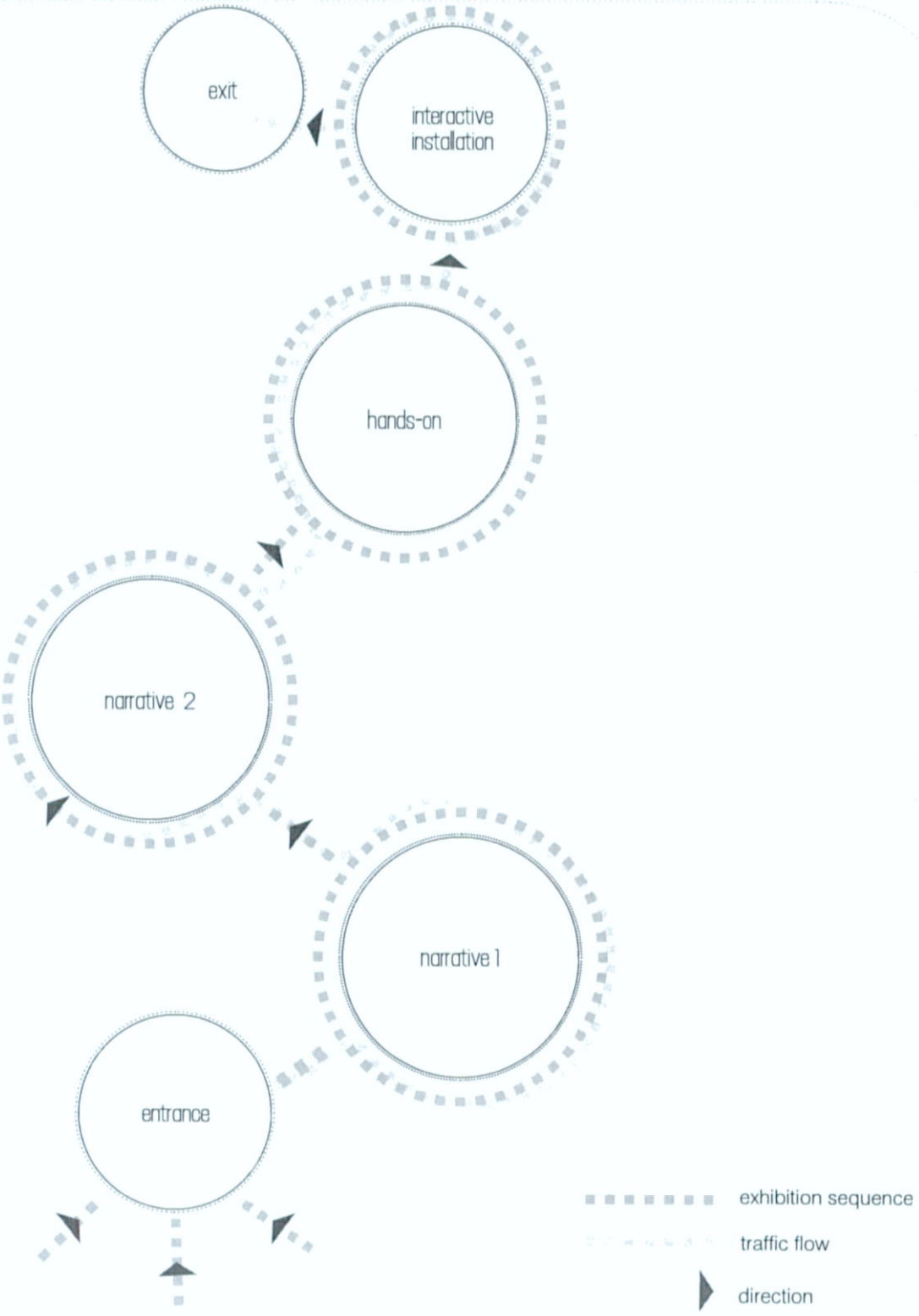


Figure 34: Bubble Diagram Selected Option

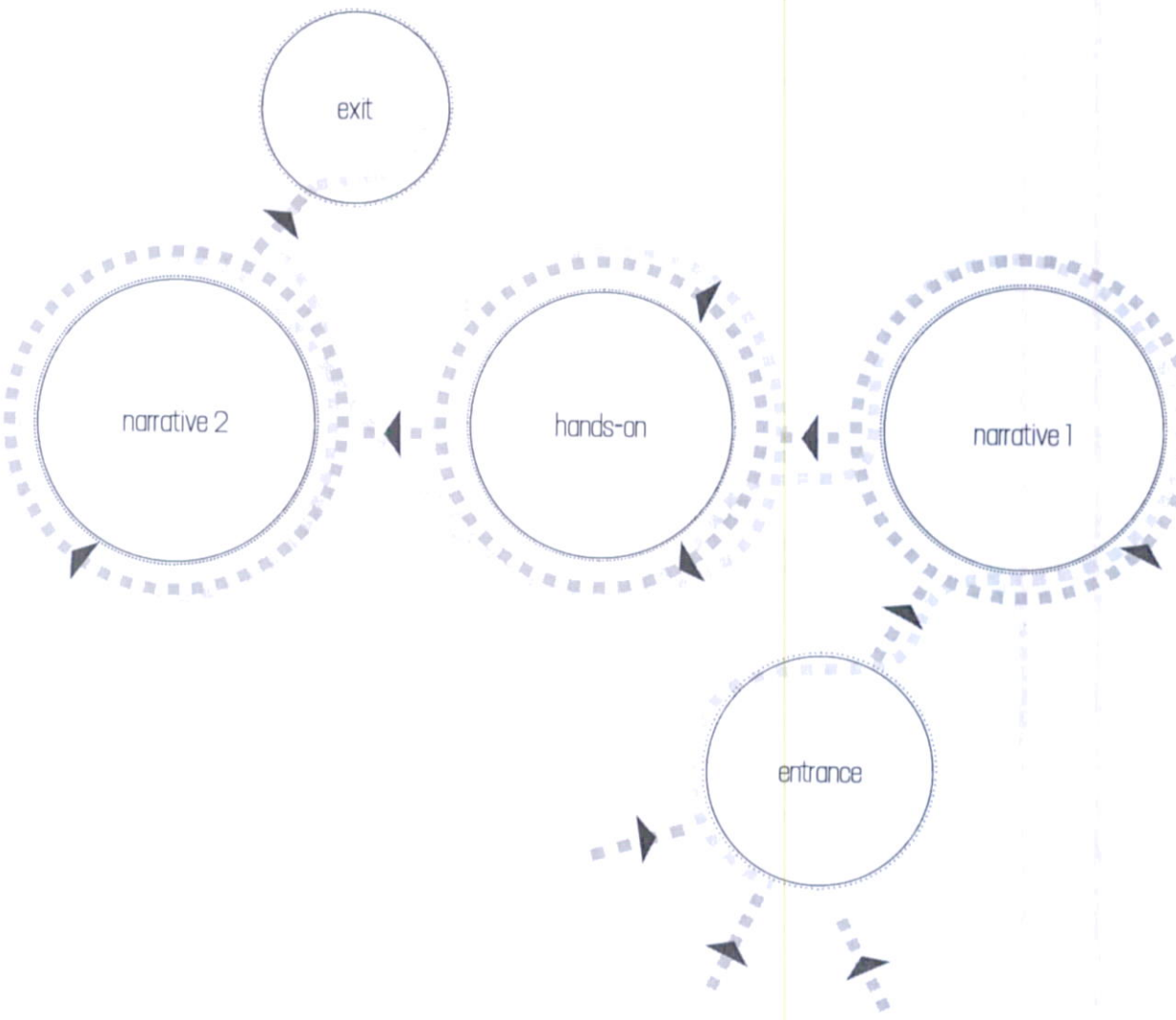


Figure 35: Bubble Diagram Option 2

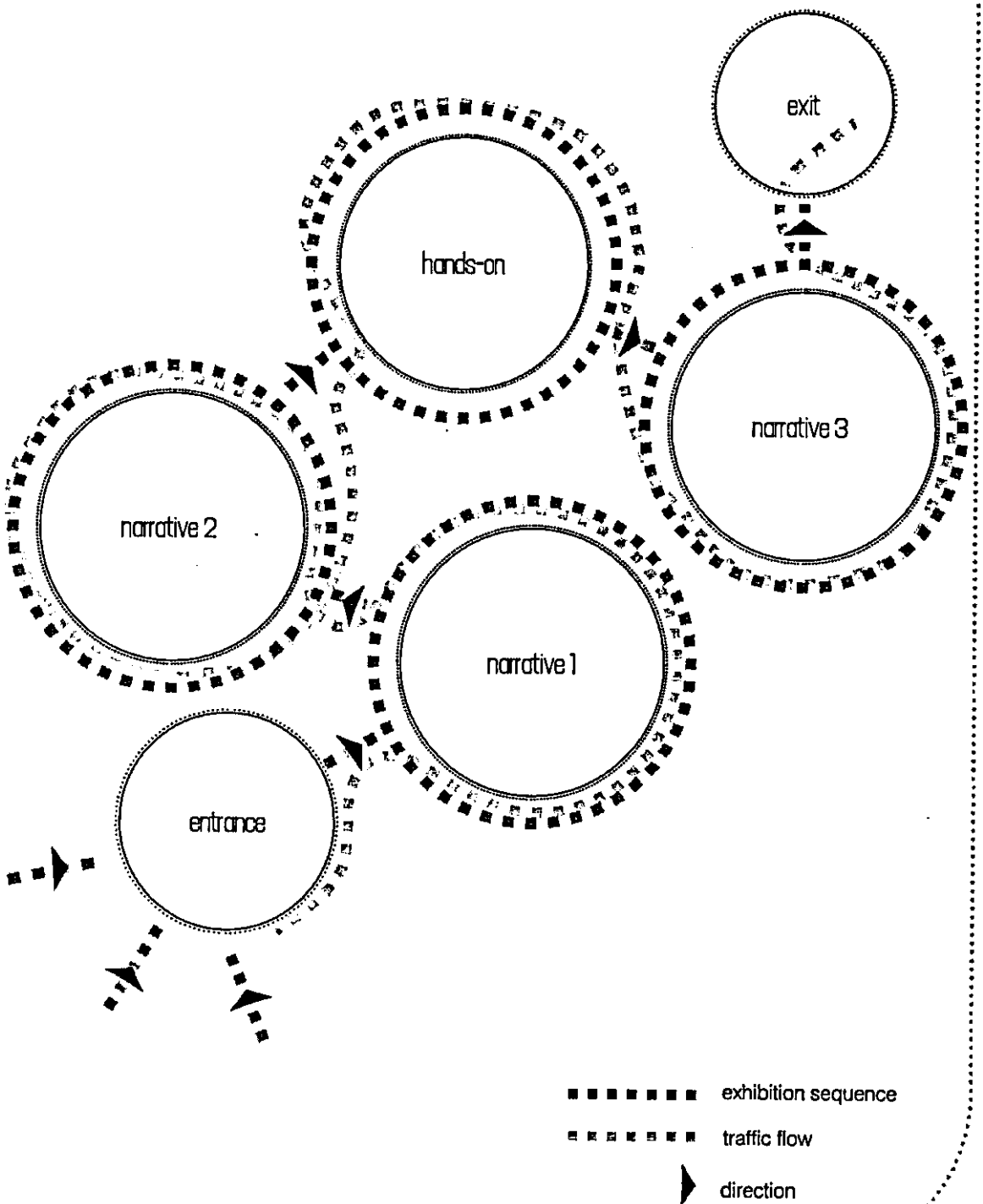


Figure 36. Bubble Diagram Option 3



Figure 37 Bubble Diagram Option 4

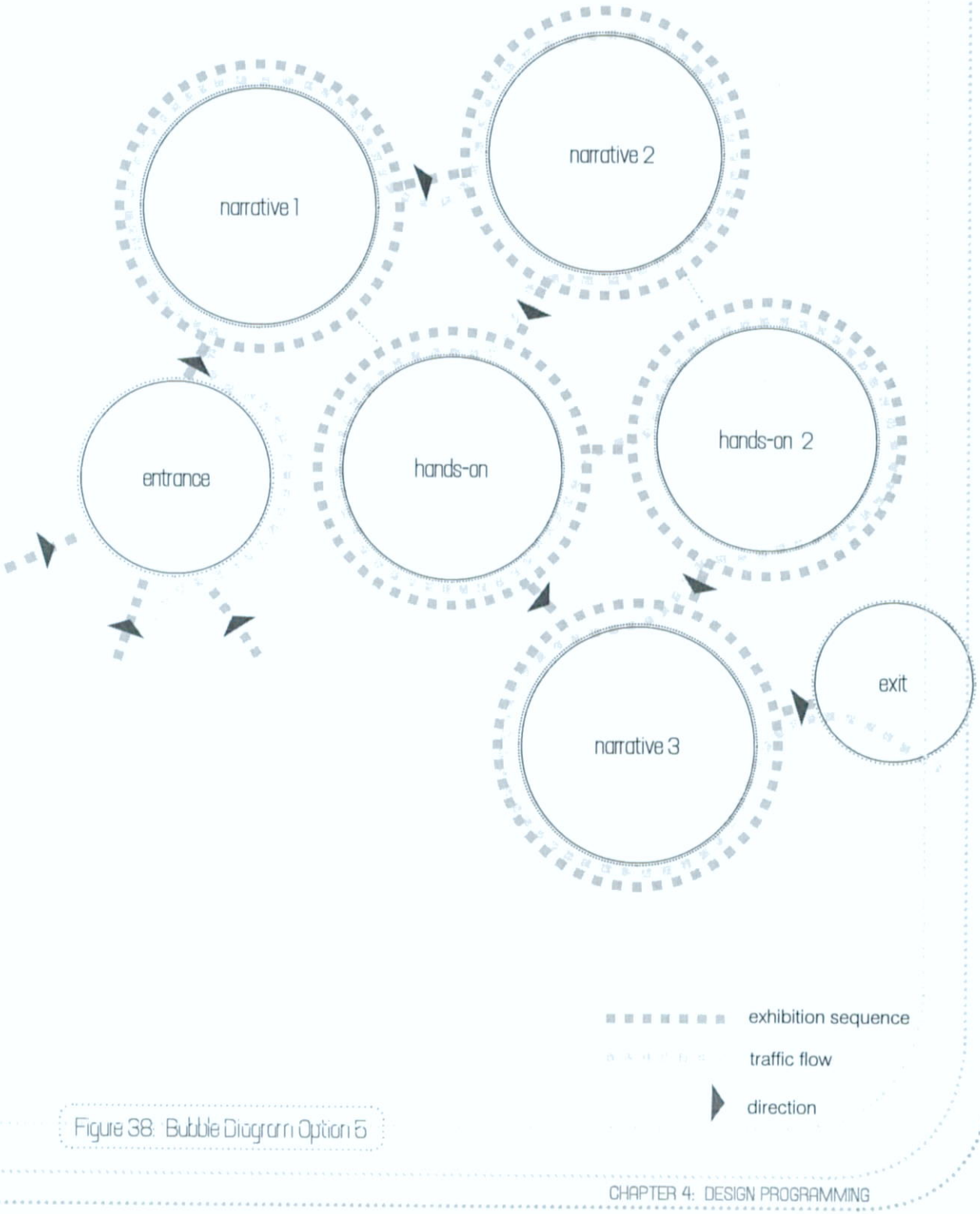


Figure 38: Bubble Diagram Option 5

4.6 DISPLAY REQUIREMENTS

DISPLAY SIZE	ARTIFACT NAME**	DISPLAY METHOD
	NECKLACE EARRINGS	For visual reference please go to: http://www.mannequinmode.com/Elegant_Woman_Bust_DS-033.jpg
SMALL	BRACELET RING	For visual reference please go to: http://www.mannequinmode.com/Fiberglass_Display_Hands.gif
	PURSE / CLUTCH NAPKIN LETTER / PAPER COLLAR BUTTONS	For visual reference please go to: http://chdisplay.en.ec21.com/offer_detail/Sell_acrylic_hat_display_stand--8869924.html?gubun=S

Figure 39: Jewelry Bust

Figure 40: Hand Display Form

Figure 41: Paper Stand

Table 5: Display Requirements

**information retrieved from http://www.costumemuseumcanada.com/public/index.html

SIZE AND WEIGHT OF DISPLAY	ARTIFACT IMAGE
DIMENSION: L X W X H 7.5" X 2.5" X 11" WEIGHT: 1.5 LBS	 Figure 42: Jet Jewelry
WRIST CIRCUMFERENCE; 6.25" HEIGHT: 7.5"	 Figure 43: Assorted Purses
DIMENSION: L X W 4.12" x 9.5" (min) - 8.27" x 11.69" (max)	 Figure 44: English Table Napkin

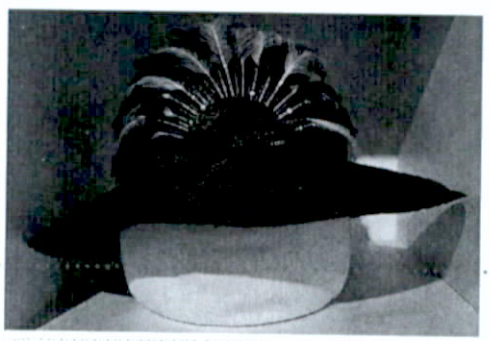
DISPLAY SIZE	ARTIFACT NAME**	DISPLAY METHOD
	HAT	For visual reference please go to: http://chdisplay.en.ec21.com/offer_detail/Sell_acrylic_hat_display_stand--8869924.html?gubun=S
MEDIUM		
	SHOES	For visual reference please go to: http://i01.i.aliimg.com/photo/v1/614561101/Acrylic_Single_Shoe_Display_Holder_Stand_Shelf.jpg

Figure 45. Acrylic Hat Stand

Figure 46. Acrylic Shoe Stand

Table5. Display Requirements (Continued)

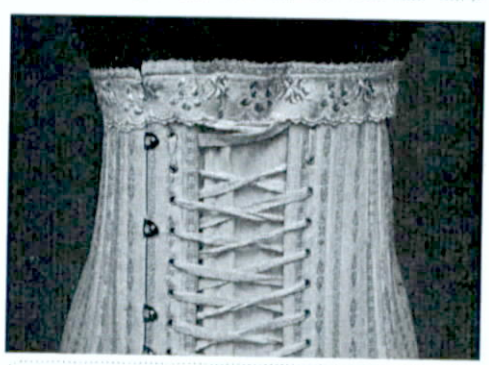
**information retrieved from http://www.costumemuseumcanada.com/public/index.html

SIZE AND WEIGHT OF DISPLAY	ARTIFACT IMAGE
HEIGHT: 250 MM	 Figure 47 Hat
DIMENSIONS: L X W X H 40 X 140 X 100 MM	 Figure 48: Shoes

DISPLAY SIZE	ARTIFACT NAME**	DISPLAY METHOD
		For visual reference please go to: http://www.mannequinmode.com/Male_Dress_Form_Torso_with_chrome_base.jpg Figure 49: Male 1/2 Torso
MEDIUM	SHAWL MALE WAISTCOAT FEMALE VEST AND JACKETS CORSET GIRDLE	For visual reference please go to: http://www.mannequinmode.com/F14-16W-7-200x600Chrome.jpg Figure 50: Female 1/2 Torso
	PANTY GIRDLE BRASSIERE	For visual reference please go to: http://www.mannequinmode.com/F14-16W-7-200x600Chrome.jpg Figure 51: Female 3/4 Torso

Table5. Display Requirements (Continued)

**information retrieved from http://www.costumemuseumcanada.com/public/index.html

SIZE AND WEIGHT OF DISPLAY	ARTIFACT IMAGE
DIMENSIONS: L X H 500 X 800 MM	 Figure 52: Man's Waistcoat
DIMENSIONS: L X H 482.6 X 736.6 MM	 Figure 53: Half(1/2) Corset
DIMENSIONS: L X H 482.6 X 914.4 MM	 Figure 54: 3/4 Corset Back View

DISPLAY SIZE	ARTIFACT NAME**	DISPLAY METHOD
LARGE	DRESSES FEMALE WEDDING GOWNS MALE WEDDING SUITS NIGHTSHIRTS DRESSING GOWNS KIMONO ROBE PEIGNOIR	For visual reference please go to: http://www.mannequinmode.com/Male_Dress_Form_Torso_with_chrome_base.jpg Figure 55: Male 3/4 Torso
	EVENING DRESSES FUR COATS NIGHT GOWN UNDERGARMENTS LADIES' STOCKINGS	For visual reference please go to: http://www.mannequinmode.com/F14-16W-7-200x600Chrome.jpg Figure 56: Female 3/4 Torso

Table5. Display Requirements (Continued)

**information retrieved from http://www.costumemuseumcanada.com/public/index.html

SIZE AND WEIGHT OF DISPLAY

ARTIFACT IMAGE

DIMENSIONS: L X W X H
863.6 X 152.4 X 482.6 MM



Figure 57. 19th century Nightshirts



Figure 58. Dressing gowns

DIMENSIONS: L X W X H
406.4 X 152.4 X 775 MM



Figure 59. Close up emphasis of dress

4.7 ARTIFACT CONSERVATION REQUIREMENTS

FACTORS	ENVIRONMENTAL MONITORING		IMPLEMENTATION
	MACRO ENVIRONMENT	MICRO ENVIRONMENT	
TEMPERATURE	Thermometer Routine environmental monitoring should be done for four seasons. Ongoing environmental monitoring programme and local control equipment is important.	Thermometer	In micro level, digita thermometer & hygrometer devices are included in every display box. In macro level, digital thermometer & hygrometer devices are attached on the structural frame.
RELATIVE HUMIDITY	Hygrothermograph** Thermohygrometer** Routine environmental monitoring should be done for four seasons. Ongoing environmental monitoring programme and local control equipment is important.	Thermometers and Hygrometers	
PARTICLE MATTER AND POLLUTANTS			Regular cleaning of t space is arranged.
BIOLOGICAL ORGANISMS	Collection objects have more risk than stored objects. Sticky traps and light traps. Identifying kind of organisms in the space. Collection inventories.		No food allowed in th exhibition space. Regular cleaning of t space is arranged.

Table 6 Artifact Conservation Requirements

ENVIRONMENTAL CONTROL		TERMINOLOGY AND STANDARDS	IMPLEMENTATION
MACRO ENVIRONMENT	MICRO ENVIRONMENT		
'AC is essential to signer. -conditioning can work ccessfully when a volume air is tightly controlled in isplay case.	Conditioning a smaller space (showcase or box) rather than a large room is cheaper, simpler, and more sustainable.	High temperature results in high molecular activity, and heightening chemical reactions.	Every exhibition stays maximum three weeks, so that ventilation in micro level is minimized. In macro level, a split system portable air conditioner is provided in the exhibition space.
	Silica gel: Absorbs and releases atmospheric water as conditions change. Chemically inert. Compressed tiles. The exhibit case needs to be tightly sealed. (Beads, Cassettes, Sheets)	Relative Humidity (RH): Amount of water vapor the volume of air holds. When temperature rises, RH goes down. RH should be between 40% - 50% (the best) - 60% Extreme low RH results in desiccating, extreme high RH results in deterioration	In micro level, silica gel is placed inside every display box. In macro level, air conditioner optimizes humidity in the exhibition space.
ring the air coming into environment. zing. histicated filtering hanisms are available.	Activated carbon cloth	Particulate matter: dust Pollutant matter: airborne chemicals	In micro level, display boxes are sealed tight not to allow any particulate matter inside. In macro level, installed air conditioner filters the air that comes into the space.
ention: Reducing, ning the space from	Cedar lining is used for preventing organisms to damage the clothes.	Monitoring, prevention, extermination.	No food allowed in the exhibition space. Regular cleaning of the space is arranged.

rson can release approximately 1 wineglass full of water per hour
rson can release approximately the same heat as 60 watt light bulb

FACTORS	ENVIRONMENTAL MONITORING		IMPLEMENTATION
	MACRO ENVIRONMENT	MICRO ENVIRONMENT	
LIGHT	Monitor both light levels and period of exposure different times of the day and year. Light meters	Separating energy sources from the micro environment as far as possible, there by mitigating their impact. Using the "natural" and artificial buffering effects of the objects and construction materials.	In micro and macro level, fiber optic lighting is used for display boxes and exhibition space.
SECURITY OF THE COLLECTION		As far as possible a record photograph should be kept of every object in the collection.	CMC staff monitors t exhibition space for security purposes.

Definitions
Micro Environment: For smaller enclosures, such as display cases, vitrines, storage cabinets or boxes
Macro Environment: Factors in a space that is room size or larger
Each exhibit case has its own environment. The tighter the box sealed, the more self-contained the environment.

Hygrothermograph: A device that is used to simultaneously record temperature and humidity on a line chart. It might b either battery-powered or spring-wound. The device records data, in the form of a line, on a roll of paper that is mounte on a revolving drum, which turns at a predetermined rate. This system provides a visual representation of fluctuations i temperature and humidity over a given time period. Lines on the chart are drawn by two separate pens, one attached t temperature-sensing element and the other attached to a humidity-sensing element. Hygrothermographs are often use in areas where it is important to track fluctuations in both humidity and temperature, such as laboratories, museums an agricultural storerooms.

Thermohygrometers: Instruments that measure temperature and humidity levels in a space that houses collections. Constant and controlled temperature and humidity levels are essential for the long- term survival of collections. Advanc in technology have led to more accurate and cheaper instruments including data loggers.

Table6. Artifact Conservation Requirements (Continued)

ENVIRONMENTAL CONTROL		TERMINOLOGY AND STANDARDS	IMPLEMENTATION
MACRO ENVIRONMENT	MICRO ENVIRONMENT		
stricting duration and ensity of light exposure. stance and ventilation for at storage and display as should be kept in k when not in use. filters.	Fibre optics, though expensive, do provide directional illumination with good control of light level, do not give off either heat or UV light.	In an exhibit case, lighting devices are internal and heat build-up is a major concern. As well as UV of the light is the most damaging to textiles. Natural sunlight, florescent and incandescent lights release UV. Florescent lighting releases the most UV's and incandescent lighting releases the most heat. There are UV filtering materials for UV. In exhibit spaces, general illumination can be kept well, under 30 foot candles = 300 lux For textile objects max light level should be 50 lux.	In micro and macro level, fiber optic lighting is used for display boxes and exhibition space. Also, the exhibition is staged in a place for maximum three weeks.
all, high-value items h as jewellery should housed in a separate, ure storage cabinet.	A vital line of defense is the individual showcase. Locks, well-fitting doors, appropriate quality of glass. The use of small security alarms within showcases may help to reinforce invigilation.	The risk to costume and textiles on display will vary enormously. Factors which should be considered are the value or simply attractiveness of the objects.	In micro level, display boxes are secured by lock cylinders. The boxes are slid in to the display systems and secured with acyrilic blockers. In macro level, gate turnstiles at the exit secures the exit.

CHAPTER 5

CONCEPT INVESTIGATION

CMC Volunteering Experience
Vintage Clothing Experience
Sewing Experiment
Folding Experiment

In this chapter I am going to present four different first-hand experiences that complemented the design process in terms of understanding the client's needs, visual presentation of clothing artifacts, understanding non-verbal communication qualities of clothing especially that is related to the changes in economy and technology of the society, capabilities and properties of cloth, mimicking quality of cloth by using different mediums, as well as extracting concepts from these experiences and creating a design vocabulary for Traveling Exhibition System. Each experience was carried out in different venues which were an exhibition space, an antique store, a vintage clothing store, a sewing room, and a design studio. These spaces offered different intimacy levels with clothing. Each experience is recorded by photographs and notes.

"DISPLAYING A DRESS ON A PROPERLY FITTED MANNEQUIN NOT ONLY PRESENTS IT TO THE PUBLIC. THE PROCESS OF DISPLAY ALSO REVEALS DETAILS ABOUT THE GARMENT'S STYLE, SHAPE AND HISTORY THAT MIGHT NOT BE APPARENT WHEN IT IS LYING FLAT IN A BOX."

(AUSTRALIAN DRESS REGISTER)

5.1 CMC VOLUNTEERING EXPERIENCE

As mentioned in Chapter1, CMC stages exhibits for cultural events and special invitations. These exhibits can take plac on site at the Millennium Centre, 389 Main Street, Winnipeg or off site. Since the museum is officially closed and there is n curator working for the museum, board members put careful thought into narrating Canadian social history through thes artifacts. Board members planned these exhibits including the theme and curation of the exhibits. "Wedding gowns: fro Victorian times to the Millennium" exhibition was sponsored by Heritage Winnipeg and was staged during Open Doo Winnipeg event on May 27th 2012 in Millennium Centre. The theme of the exhibition was to highlight a wedding gown fro every decade from 1830 to 2000.

As mentioned earlier the CMC uses the Millennium Centre's storage space to store over thirty thousand artifacts in boxe Each box was labeled with a card that shows type of artifact, donation code, artifact code, amount of pieces, and year th the artifact belongs to. For this exhibition the museum decided on fifteen mannequins that were dressed on to tailor sty mannequins. My group, which was 4 people, dressed 5 mannequins in two hours. For this experience I will emphasize th process of handling and dressing the mannequins. As it appears in figure 59, this white wedding dress belonged to a 1970 bride.

During the preparations of dressing the garments, the admins reminded us to take off any accessories such as, bracele necklace, and ring in order to avoid possibilities of catching or clinging (grabbing) artifacts.

Unpacking



Figure 60.

Dress on mannequin



Figure 61.

Buttons



Figure 62.

Next, we spread a clean white sheet on the floor in case of dropping any items. Then, we put on fine white cotton gloves to avoid any contact while dressing the garment. The box was brought from the storage shelf and placed on the table as it is shown in figure 56. The way museum stored clothing items were: wrapped separately with acid free white tissue and spread in the box evenly flat without any pressing or stretching. Two of us opened the tissue, looked for the pieces if there was any undergarment.

Since textiles consist of organic compounds that are subject to degrade and change by time, it is important that clothing artifacts should be handled carefully without any stretching. Because there was no size label on the dress, the waist was measured in order to pick a right size mannequin. This simple process minimalizes stretching of the clothing. Considering mannequins are manufactured based on contemporary female measurements, sometimes it was hard to find a good fit for a small bridal dress. The next step was to take out the wedding dress and undo buttons. Then one holds the dress form top and other opens the skirt wider and slips the dress over the mannequin (figure 57). As shown on figure 58, 59, and 60, buttons were done at the back and wrists. Figure 61 shows the bridal coat dressing. Finally the mannequin was dressed up and ready for other group to take upstairs.

djusting



re 63

Details



Figure 64

Putting on the coat



Figure 65

Wedding Dress



Figure 66

5.2 VINTAGE CLOTHING EXPERIENCE

Since all CMC artifacts are packed and stored in Millennium Centre, it was difficult to look into properties of clothing. Finnegan states in Chapter 2 that clothing has properties that communicates to its observer non-verbally. Therefore, local vintage and antique stores were visited for this study. The study was carried out at "Vintage in the Village", 194 Osborne Street and "Antique Store", 197 Osborne Street. The intent of this study was to experience what kind of information clothing offers and form vocabulary that will assist in TES's design. In order to reflect findings of the study satisfactorily, I have arranged them under three groups: color study, fastening methods study, and texture study. For this study macro photography was used to capture visual properties in depth. This method revealed the rich texture and embroidery on clothing as well as details of sewing techniques. With this study I aim to understand and carry the features of the textiles including, color, texture and reaction, to my project design.

Brocade Dress 1

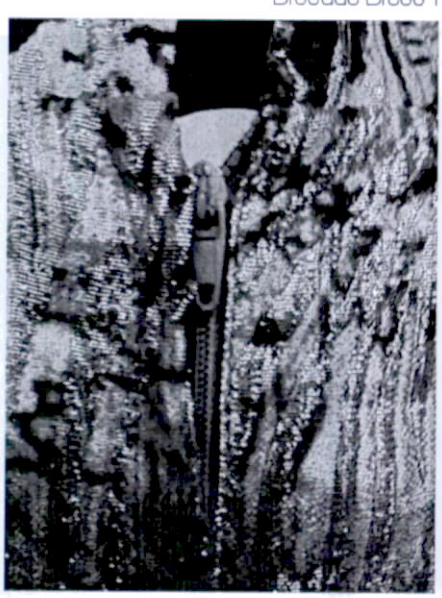


Figure 67.

Brocade Dress 2



Figure 68.

Velvet Dress



Figure 69.

COLOR STUDY ON VINTAGE CLOTHING

As it is stated by Ruth Finnegan, cloth speaks to our visual and tactile senses. By means of these senses human brain can perceive, recall and reassociate events and memories. With this study, my purpose was to experience non-verbal communication through colors. I found that the selection and combination of various threads in a woven cloth has a big impact on the cloth's color, brightness, hints about the occasion eventually the wearer's mood. As it appears in figure 63 and 64, the cloth has a glossy as well as a rich combination of blue and orange. Moving from my cultural traditions as a viewer, this dress immediately evokes my memory that this clothing could be for a special event such as a cocktail party or a wedding that might have taken place in an urban setting. Whereas in figure 65 and 66, colors of the cloth tells me this was a spring or summer dress and casualness in use. In figure 67, this clothing offers neutrality in use in other words, could have used for work or casual occasions with a touch of femininity by means of brown and pink thread colors.

Back Fastening

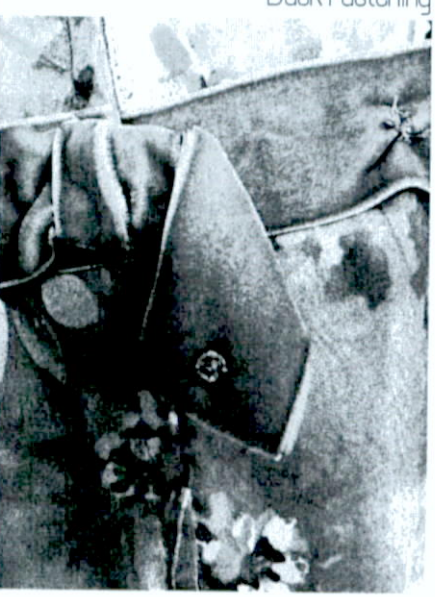


Figure 70.

Coat Button Detail



Figure 71.

Brocade Dress 3



Figure 72.

FASTENING METHODS STUDY ON VINTAGE CLOTHING

I looked at dresses and clothing items to study the fasteners and closures. From this study I found that there are variou kinds of fastening methods for clothing. Some of these fastening methods offer both functionality and decoration.

1) Ways of using the clothing:

Adjustable vs. Non adjustable: tie(ing), button(ing), safety pin(ing) vs. stitch(ing), pleat(ing)

2) Open - Semi Open - Closed (Preference of openness of clothing) (pleating/stitching, buttoning, zipper etc.)

3) There are mechanical and hand tools (systems/pieces) in order to fasten two pieces together.

4) Functionality and Decoration purposes

These fastening methods improved over time, culturally became (evolved/enhanced) available in clothing sector/field b time. (For example, Jo Ann was explaining how the first buttons were reused)

Buttons



Figure 73.

Hook

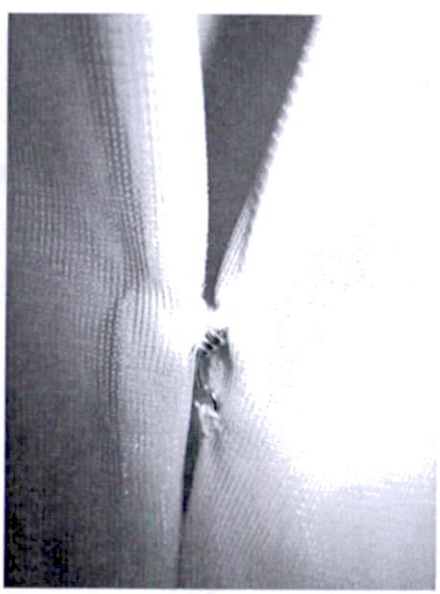


Figure 74.

Safety Pin

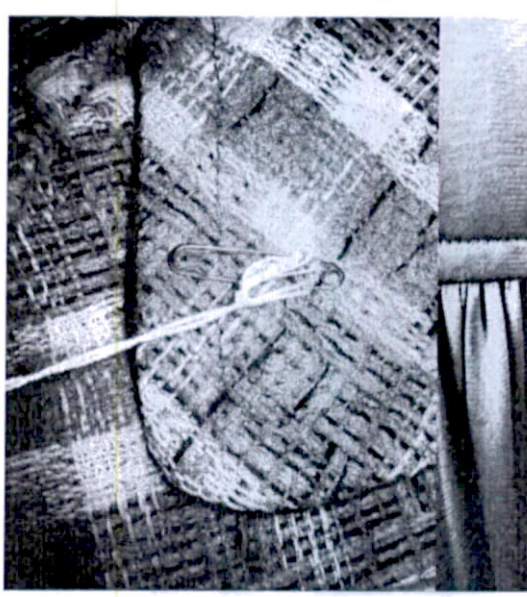


Figure 75.

ing and
titching



ure 76.

Ribbon Ties

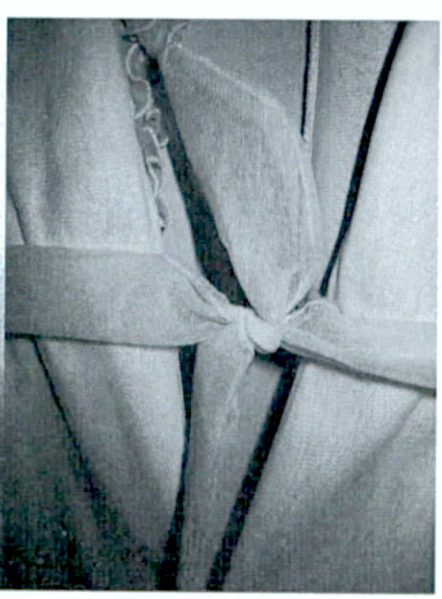


Figure 77.

Decorative Ties



Figure 78.

Embroidery



Figure 79.

TEXTURE STUDY ON VINTAGE CLOTHING

The purpose of this study was to learn/explore textile patterns and technologies. As I photographed the clothing items closely, I found that how type of thread, type of weaving has a big impact on the texture of clothing. Besides functionali of texture such as protecting from external climate conditions. As if it plays a role as an armour.

As I found on figure 77, a close up photograph of figure 76, this micro size texture gains a rigid look. Where as on figur 78, this clothing item gains a soft and organic look (can be easily bend or be puffy)

The weaving of the textile gives the clothing from a rigid look to soft look. Also, a three dimensionality with light and shadow as it appears in figure 81. The image embroidered clothing offers/gives a 3 dimensional look.

Rough (rigid) vs. Soft (organic) look which is available with lighting.

Density of weave offers an opaqueness, transparency (openness vs. close)

Which comes back to the definition of dress in Chapter 2.

The size and scale of texture gives 3 dimensionality

Embroidery gives more 3 dimension, others less

Functionality and Decoration style

Closed Weave



Figure 80.

Open Weave

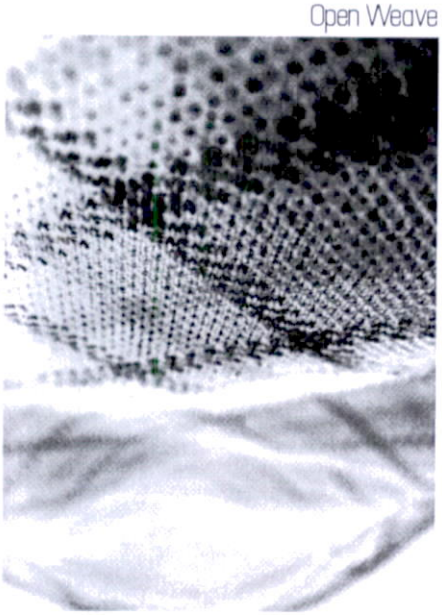


Figure 81.

Transparent Fabric

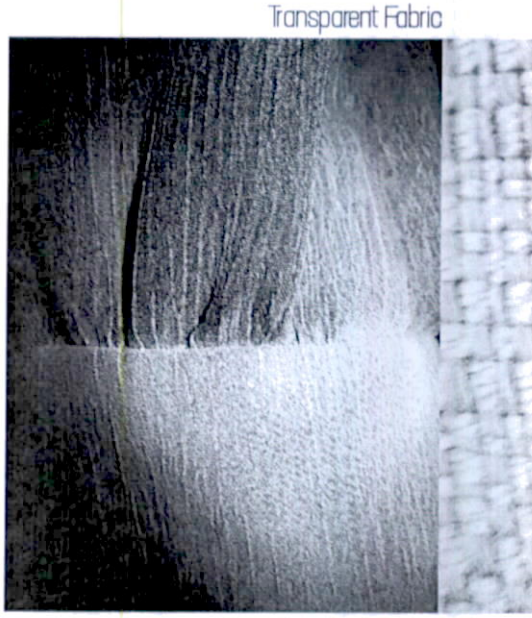


Figure 82.

en Weave



ure 83..

Sleeve Detail

Figure 84..

Sleeve Detail



Figure 85..

Open Weave

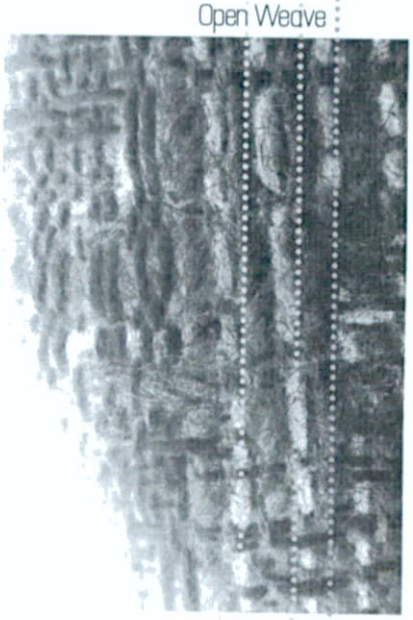


Figure 86..

5.3 SEWING EXPERIMENT

HAND SEWING EXPERIMENT

I performed two kinds of sewing for this study. The intent was to carry vintage clothing photography to forward to experience how sewing is executed what are the characteristics (properties) of a textile. To see/ experience/learn whether or not measure the difficulty level of sewing a piece of cloth.

1)Type of fabric

2) Frequency of sewing (loose/tight)

3) Capabilities of sewing and fabric (fold/bend)

different exercises with fabric and cloth

The intent for this experiment is to engage with clothing in order to see its details, visual, and tactile properties and experience its organic qualities. Sewing needs a time for preparation in every level. As a beginner, first I looked at types of stitching by hand sewing. The experience carried out by hand sewing and machine sewing. Delicacy of fabric (can be seen from stitches)

Opaque or glossy threads

Handling the cloth/holding the fabric

Start with an intention, measure, cut pieces, and folding.

How to join two pieces: corners and folding over effects.

Sewing needle



Figure 87.

Hand sewing

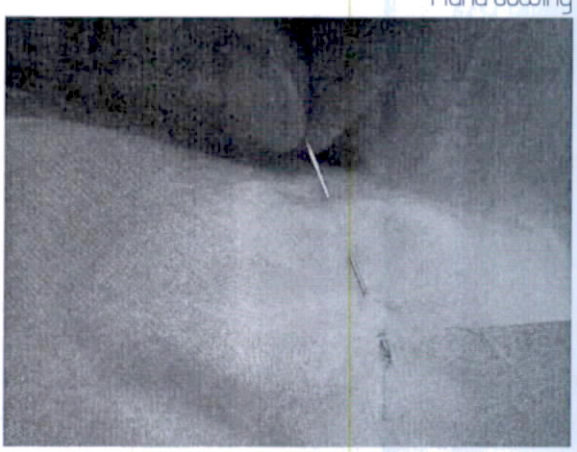


Figure 88.

d puffed fabric



Figure 89..

Running stitching



Figure 90..

Basting stitching

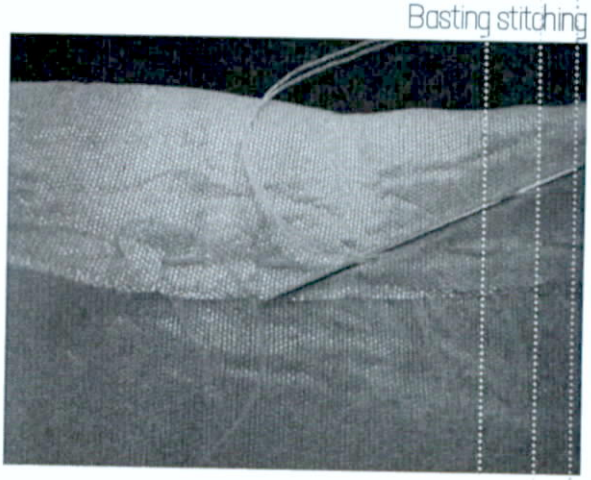
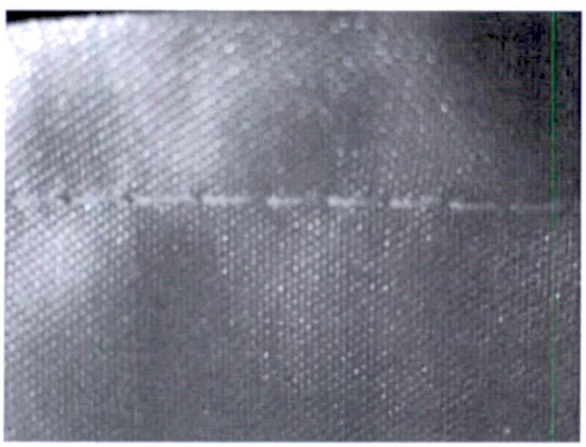
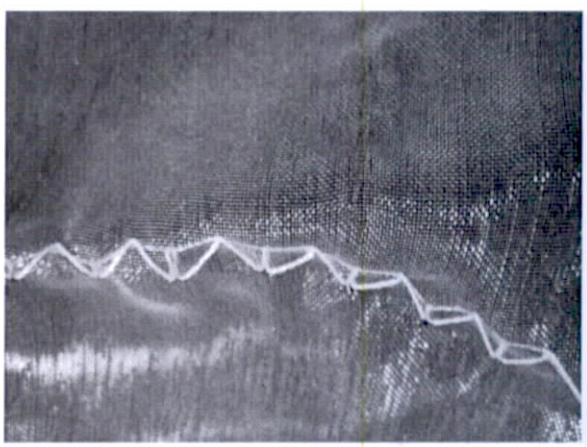


Figure 91..

SEWING MACHINE EXPERIMENT



Straight stitch Figure 92.



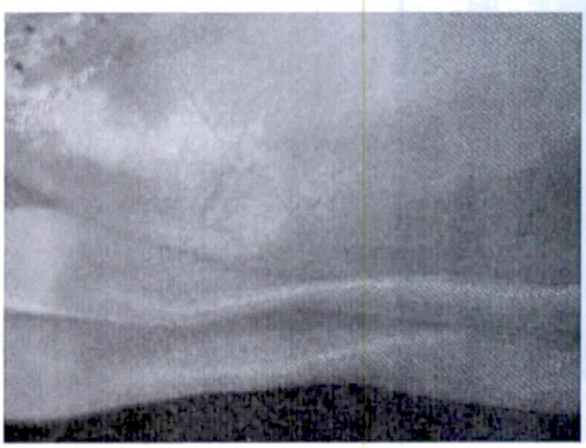
Flatlock stitch Figure 93.



Flatlock stitch



Three step zigzag stitch Figure 94.



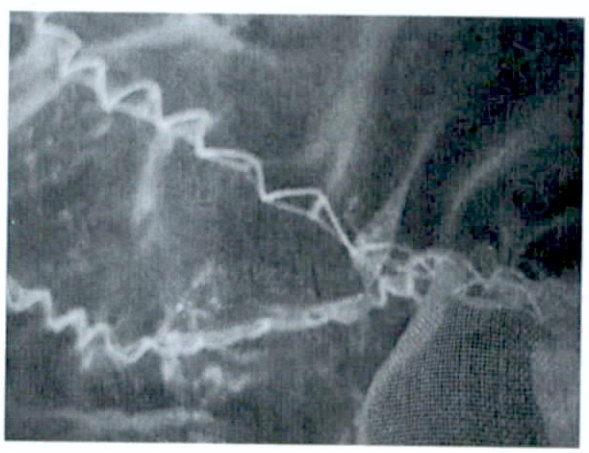
Pleated fabric Figure 95.



Slip stitch



Figure 96..



Flatlock stitch

Figure 97..



Blanket stitch

Figure 98..

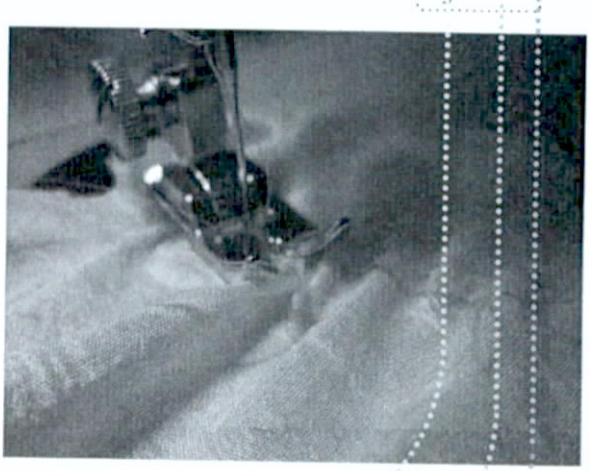


Figure 99..



Sewing machine

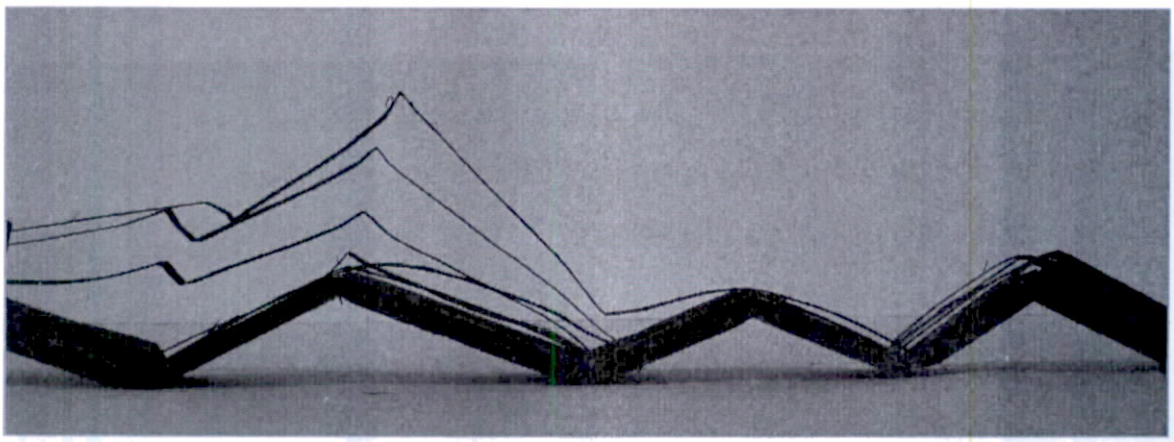
Figure 100..



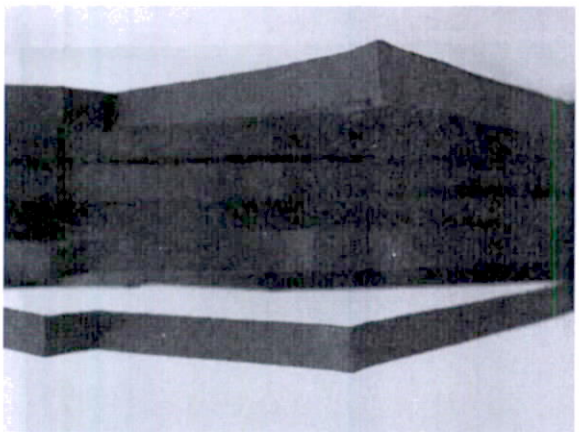
Sewing machine

Figure 101..

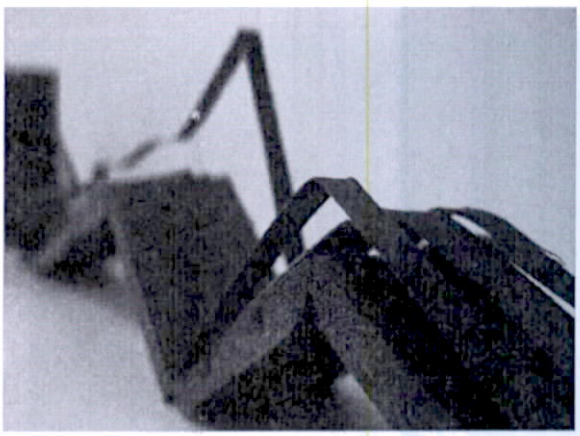
5.4 FOLDING EXPERIMENT



Folding experiment 1 - black - side view Figure 102



Folding experiment 1 - black - top view Figure 103



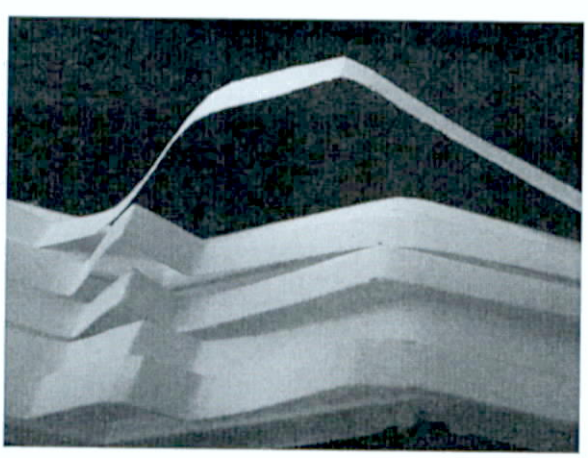
Folding experiment 1 - black Figure 104



Folding experime

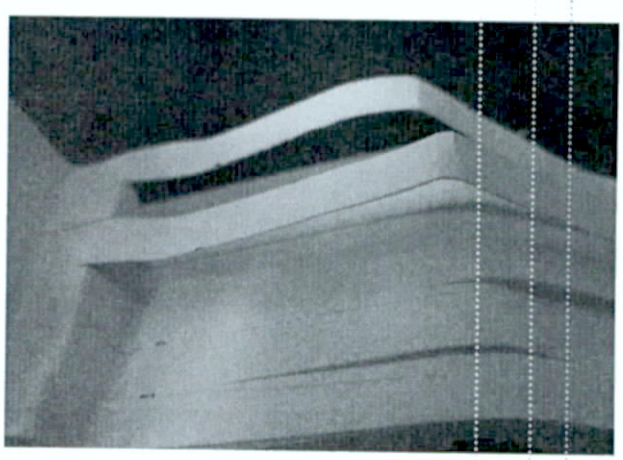


Figure 105



Folding experiment 2 - white

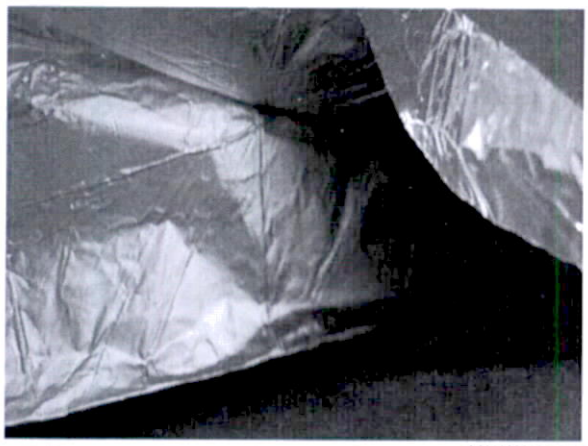
Figure 106



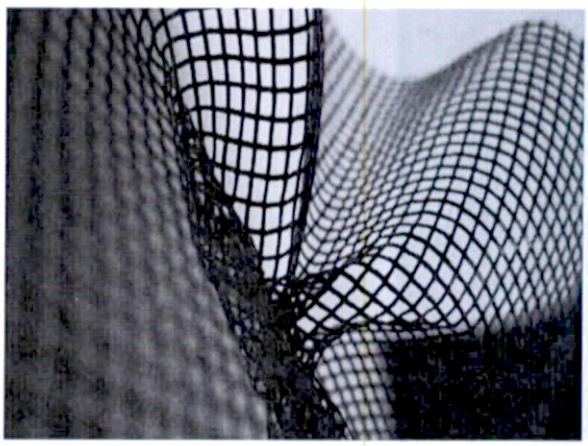
Folding experiment 2 - white

Figure 107

5.4 FOLDING EXPERIMENT (CONTINUED)



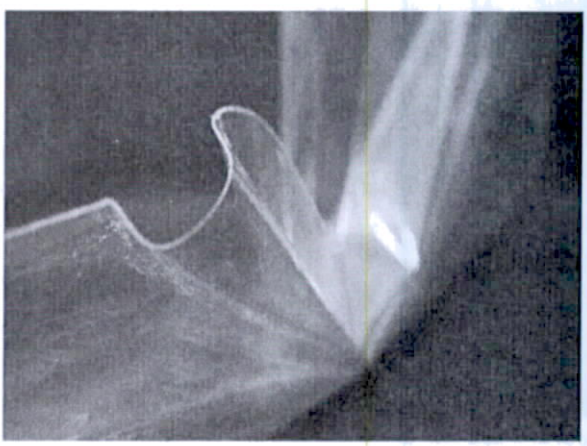
Folding experiment 3 - aluminium foil Figure 108



Folding experiment 5 - fly screen Figure 110



Folding experiment 4 - grey wrapping paper Figure 109



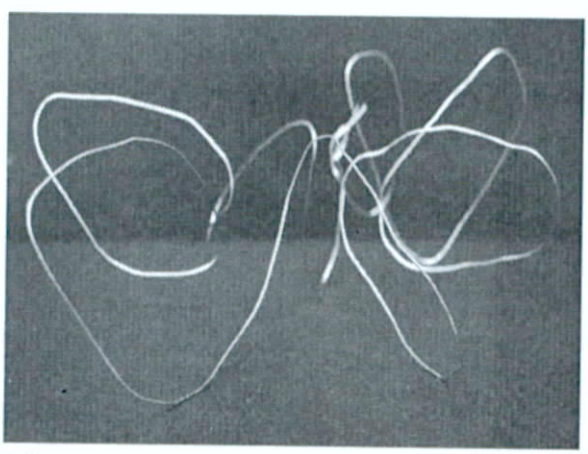
Folding experiment 6 - clear wrapping paper Figure 111



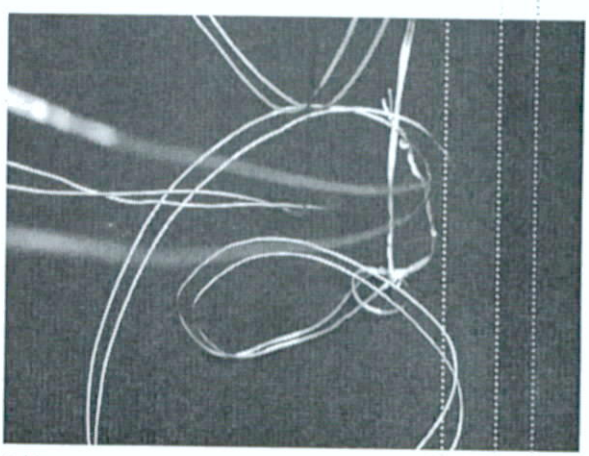
Folding experimer



per Figure 112.



Folding experiment 8 - wire Figure 113.



Folding experiment 8 - wire Figure 114.

CHAPTER 6

DESIGN PROPOSAL

Design Overview
Exhibition Exterior
Exhibition Interior
Exhibition Spatial Configurations
Exhibition Furniture
Kit of Parts
Steps of Setting up Traveling Exhibition System (TES)
Conclusion

The following chapter will discuss the development of Traveling Exhibition System (TES) design for Costume Museum of Canada. This chapter includes the rationale for the design, concept and drawings of TES, application of TES in Polo Park Shopping Centre, Winnipeg, and alternate layouts for future exhibitions.

6.1 DESIGN OVERVIEW

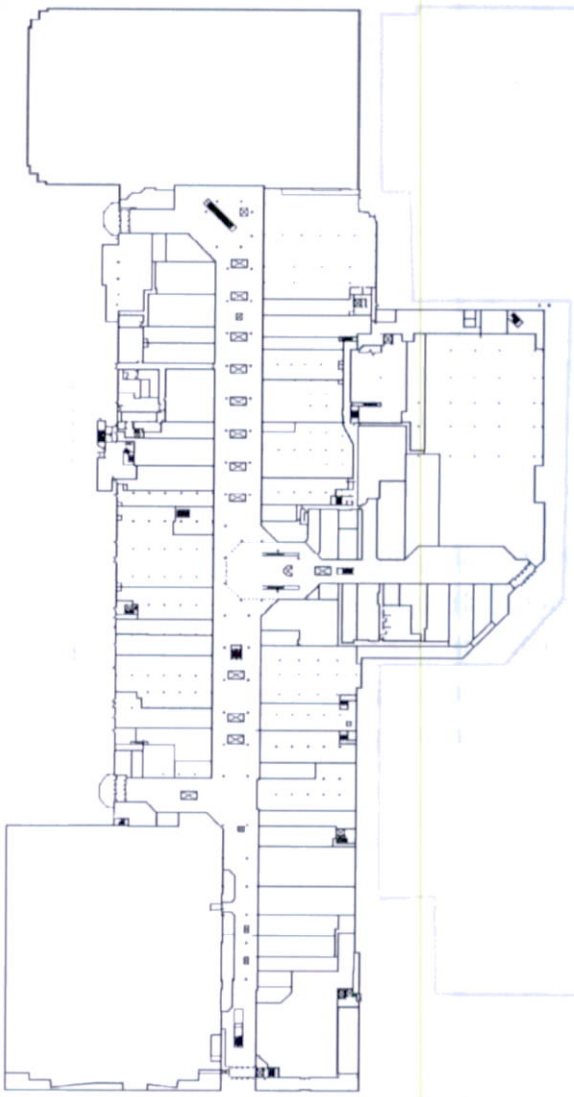


Figure 115: Site in Context

Shopping Malls have been the focus for location this project due to their potential for attracting a diverse audience. I have selected Polo Park as the site for temporary exhibition due to its large number of visitors daily as given in chapter 4. The mall administration, Cadillac Fairview, allocates some space for fund raising and charity events free rent from January to October each year. As a registered charitable organization, The Costume Museum of Canada could use the space for its exhibitions.

The space Polo Park offers is located in thecentral atrium space on the main floor in front of the vertical circulation. The central atrium space is a signature feature of Polo Park because during the day time visitors enjoy natural light coming in from the skylight in seating area and the main vertical circulation of the building is located here. Allocated space is 6.3 meter by 14.3 meter rectangular that forms the site for the CMC's exhibition. The space is provided with power from outlets on the columns.

The proposed design will showcase Manitoban Weddings as the theme due to Canadian wedding traditions' popularity, forming common ground, as well as have experience with the museum's wedding gown collection.

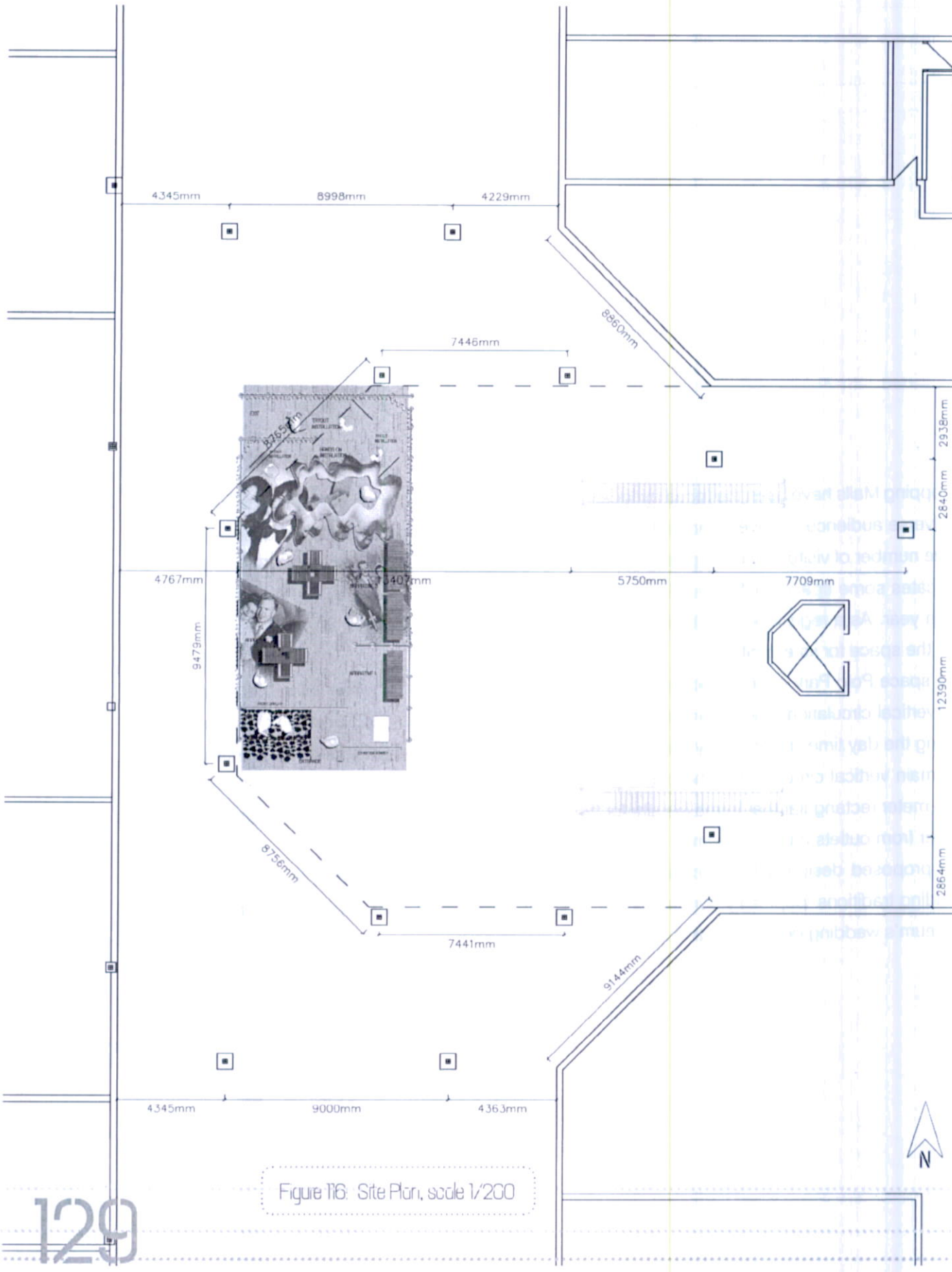


Figure 116: Site Plan, scale 1/200

6.2 EXHIBITION EXTERIOR

The Traveling Exhibition System consists of multiple layers which are structure, curtains, didactic panels and projections. The exhibition is a linear structure that is located at the Central Atrium space of Polo Park Shopping Center. This area is used for significant cultural events. It has seating areas for visitors, as well as being available for charities that would like use it for their fundraising events. The location of exhibition entrance is determined by visitor flow in the shopping center. In order to attract visitors coming from the south side and attract the visitor flow that is formed by the vertical circulation, the entrance is located facing toward Portage Avenue. The visitors first experience the mise-en-scene of bride and groom exchanging rings and the exhibition banner. The exhibition is surrounded by stores, escalators and elevator, and coffee shops.

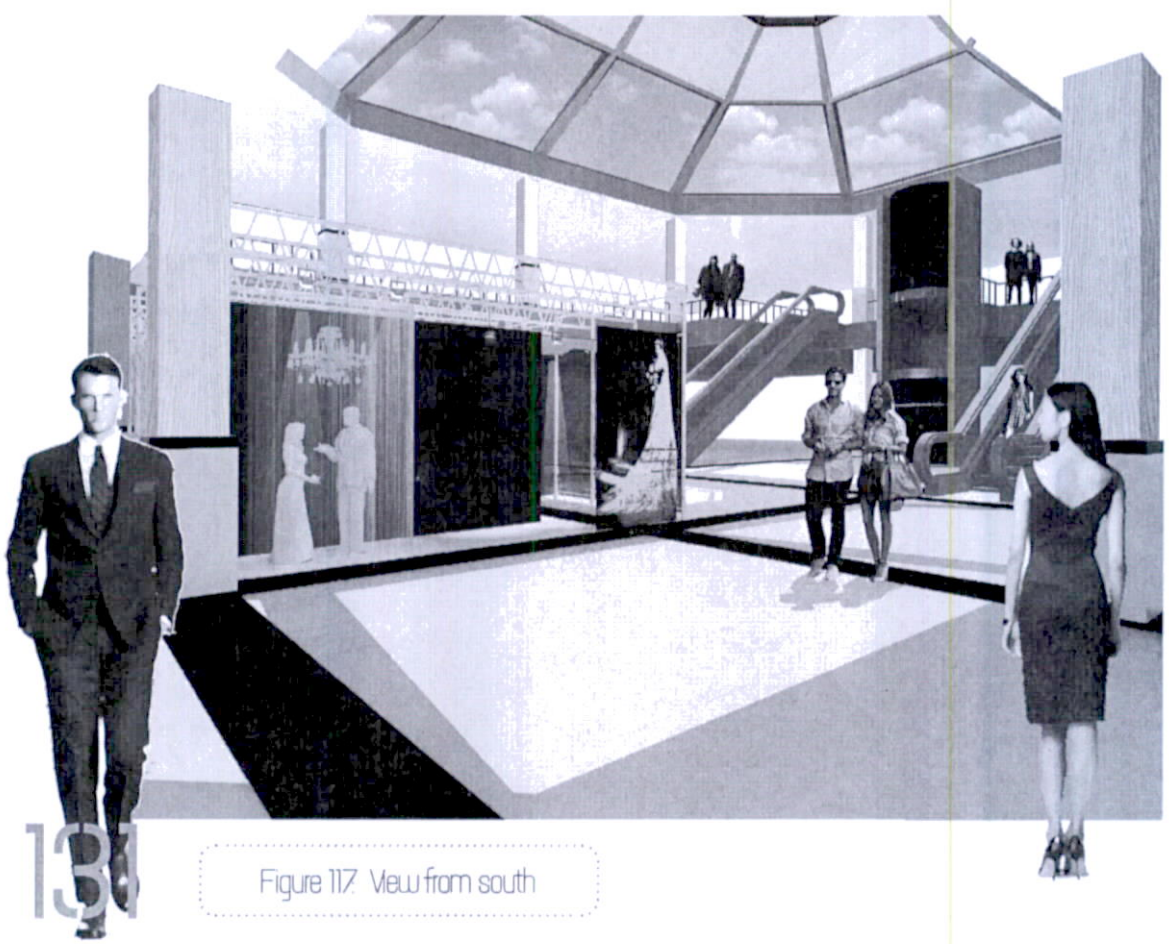


Figure 117. View from south

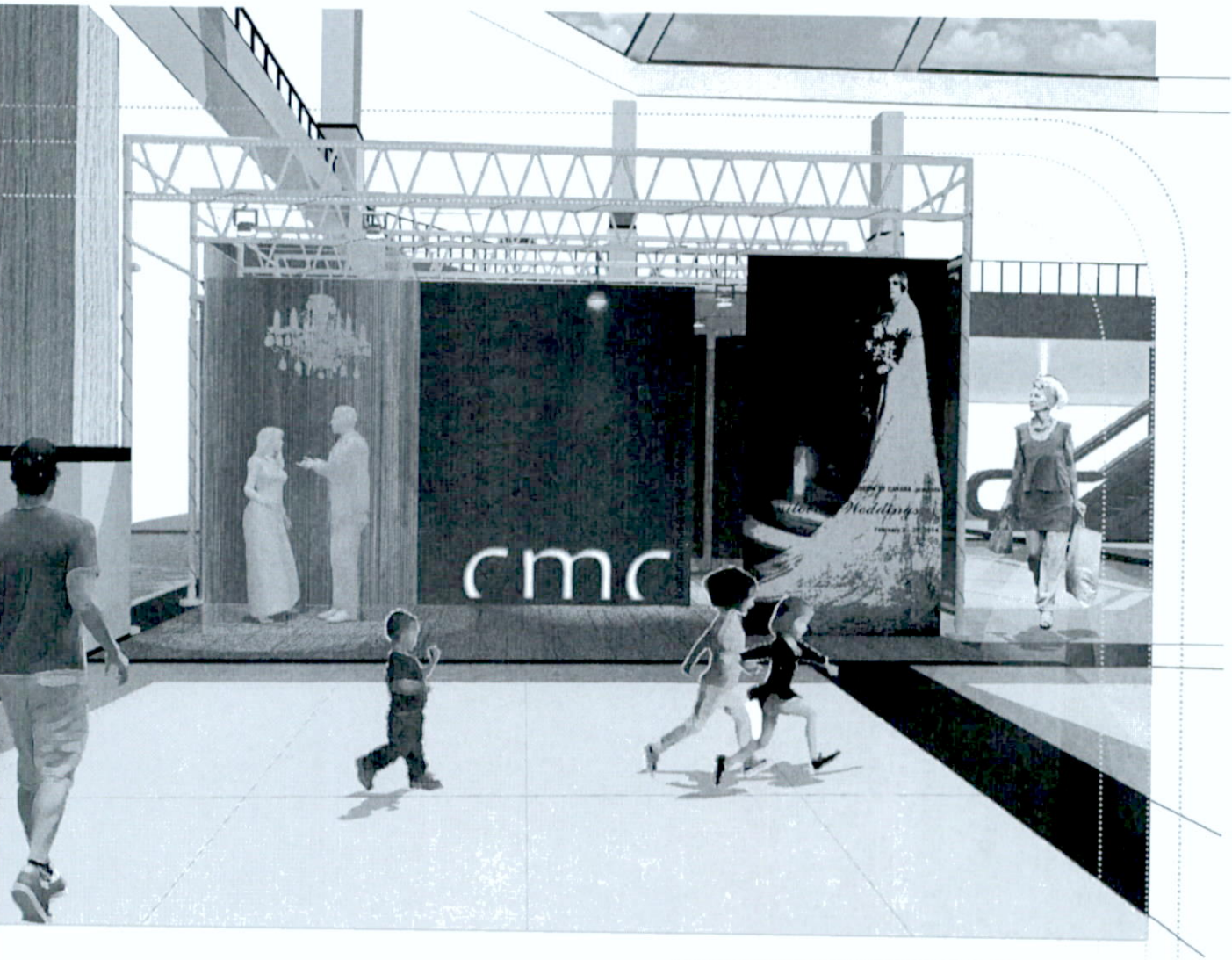


Figure 118: View from South



Figure 119: View from East

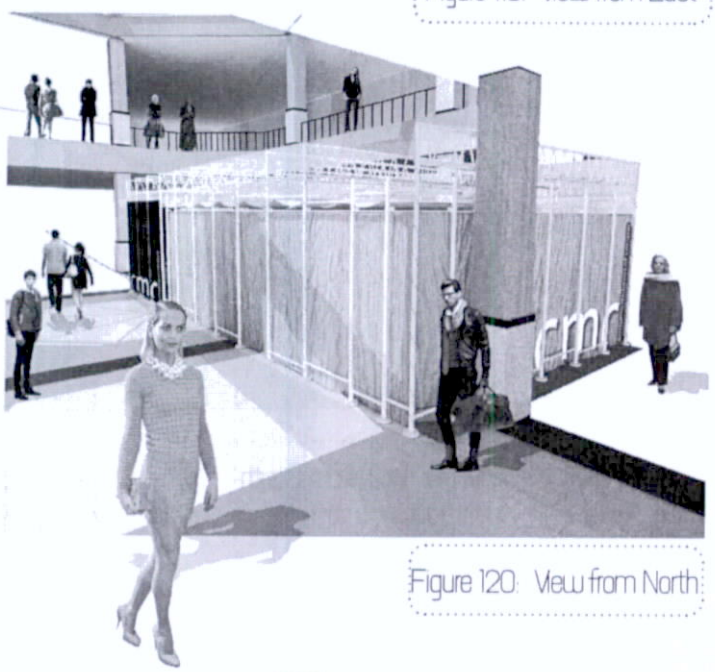


Figure 120: View from North



Figure 121: East Elevation

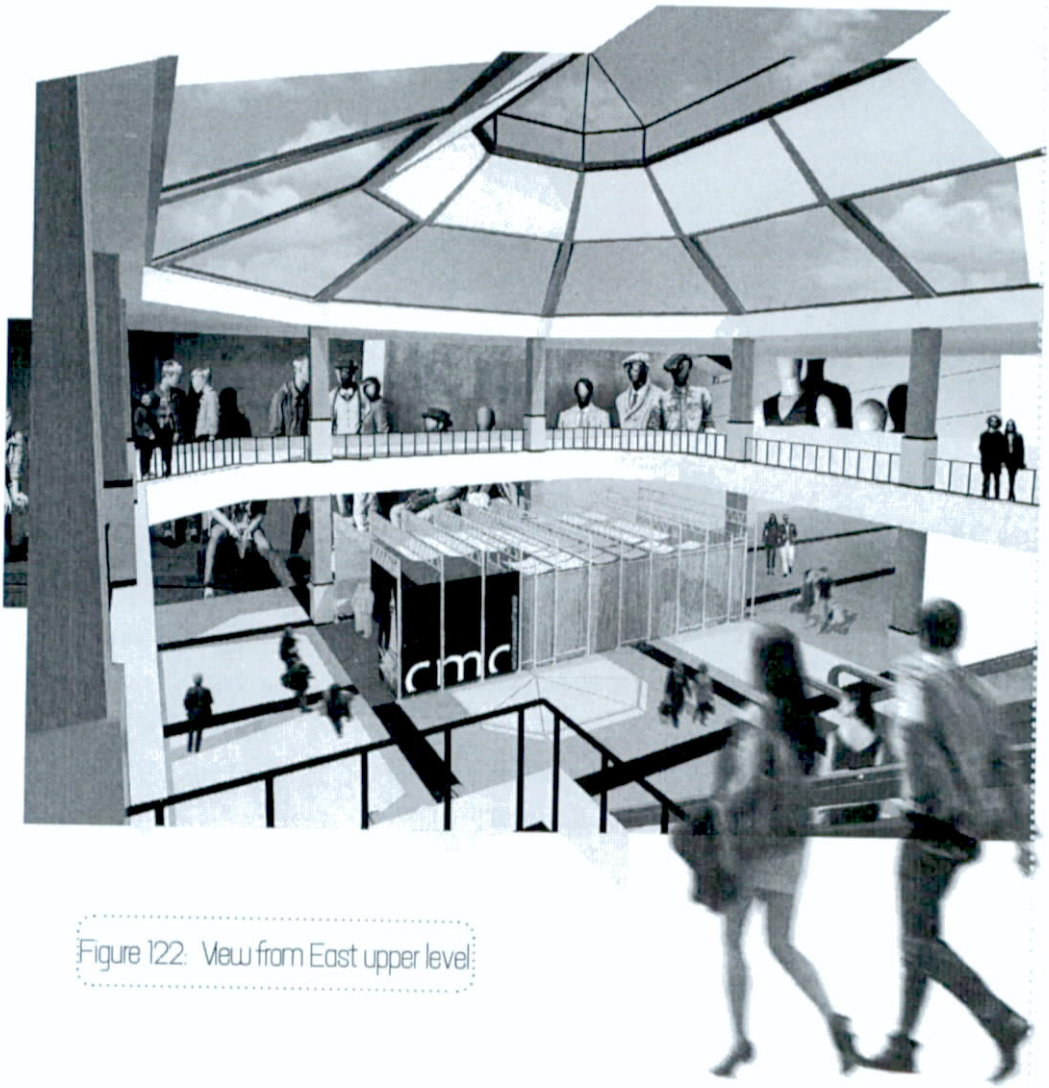


Figure 122: View from East upper level

The perimeter of the exhibition is defined and secured with a curtain. However, the exterior also needs to advertise the exhibition. Therefore, the logo design for the Costume Museum of Canada is displayed prominently against the curtain in order to arouse interest from the public and attract attention.

To moderate the sunlight coming into the space and protect the exhibition and its visitors from objects dropped from the level above, an opaque ceiling system has been incorporated into the design. Carpet tile flooring provides acoustic remediation.

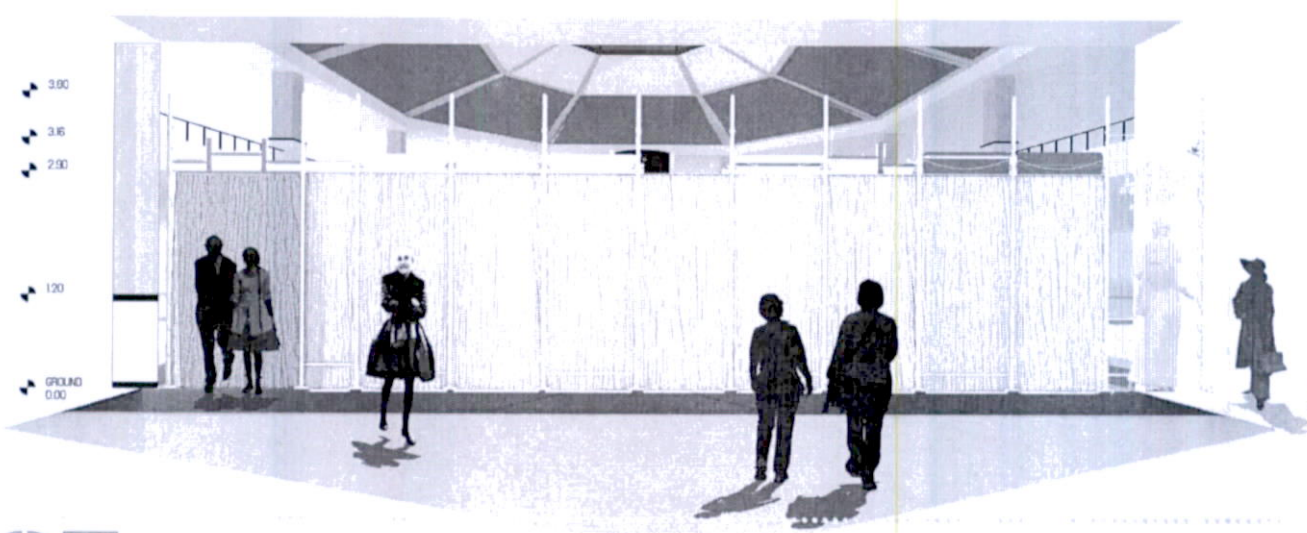


Figure 123: West Elevation

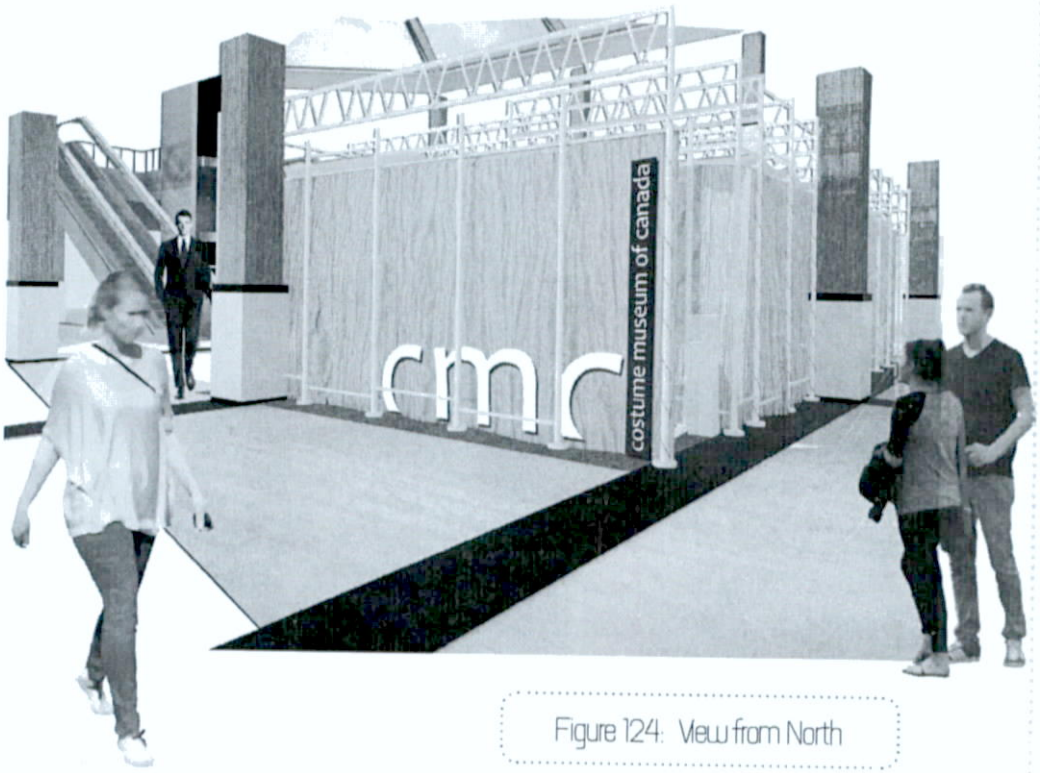


Figure 124: View from North

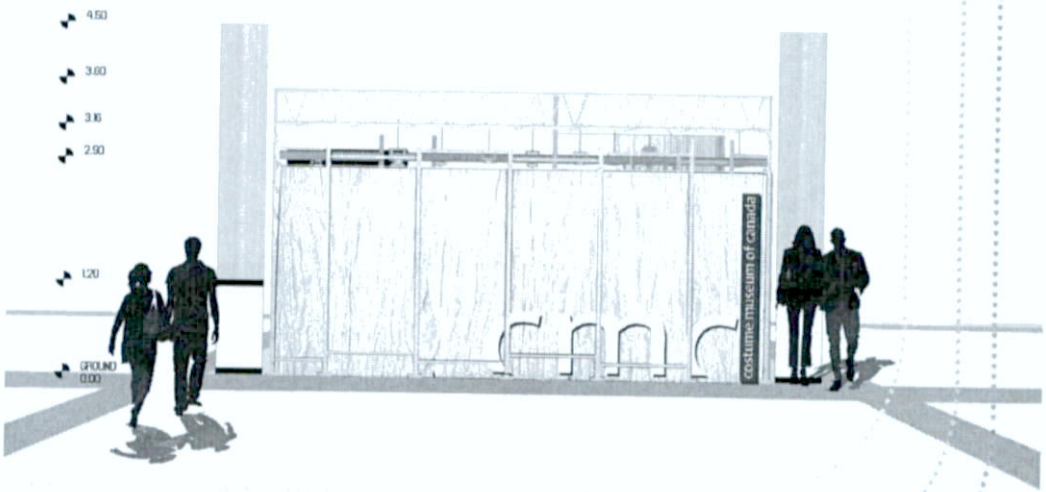
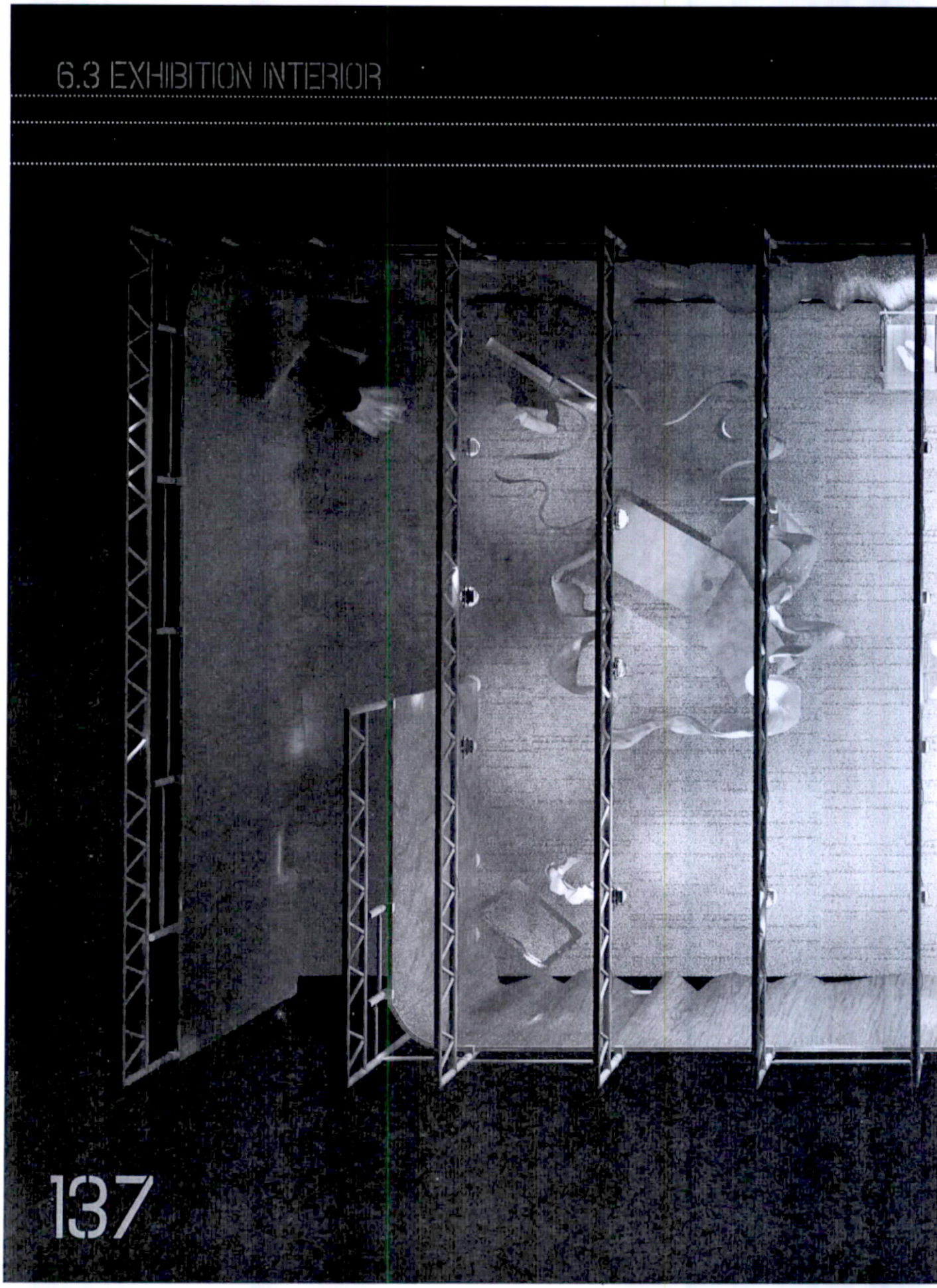


Figure 125: North Elevation

6.3 EXHIBITION INTERIOR



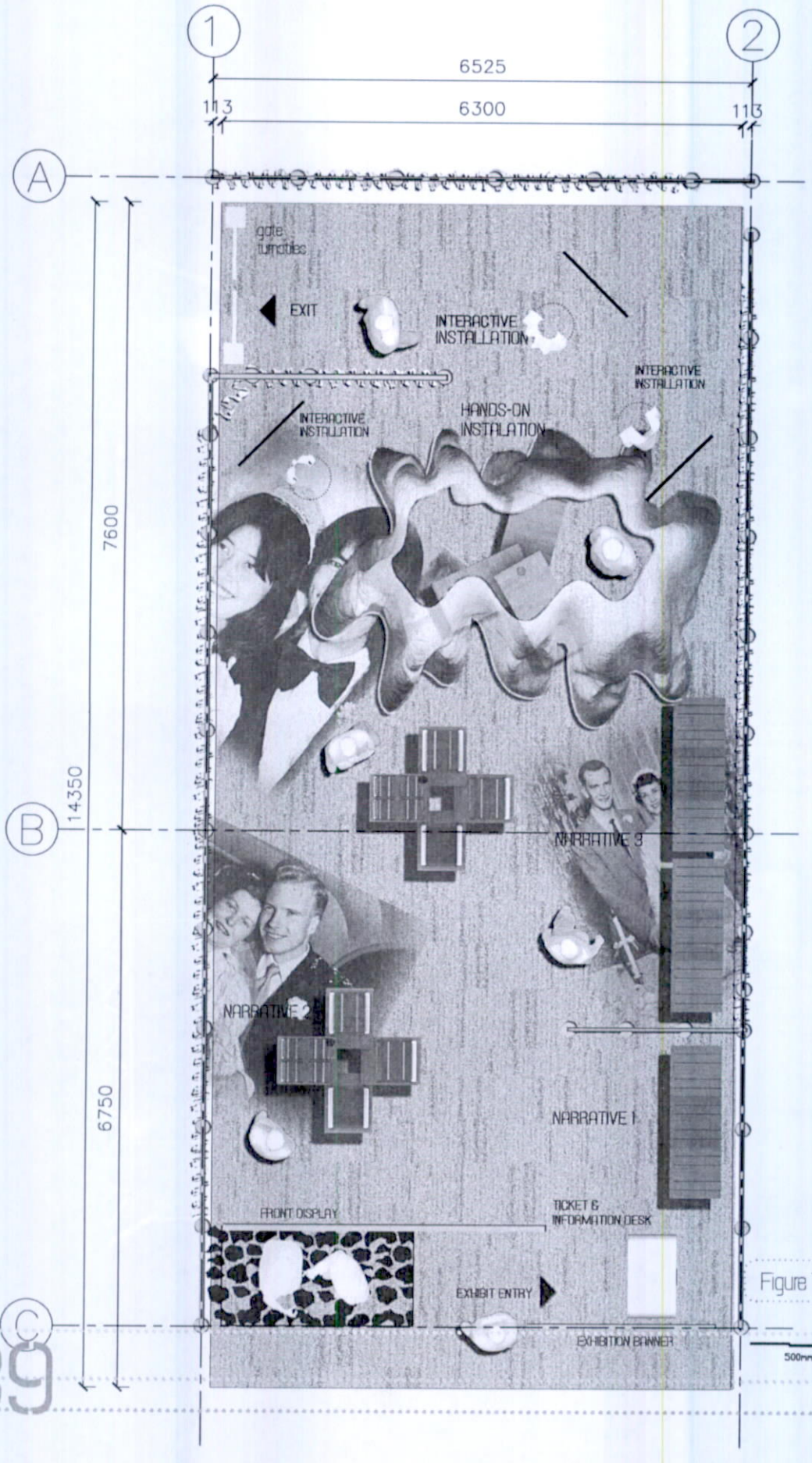


Figure 127 Layout 1 Exhibitio

The Spatial arrangement of the exhibition has been designed to unfold a narrative. The nature of the site allows a linear layout with the entrance facing south. The exhibition covers a 90 square meter area and allows 35 visitors at one time.

There are seven major spaces that form the exhibition: the entrance, the ticket & information desk and narrative part 1, narrative part 2, narrative part 3, the hands-on installation, the interactive installation, and the exhibiton exit.

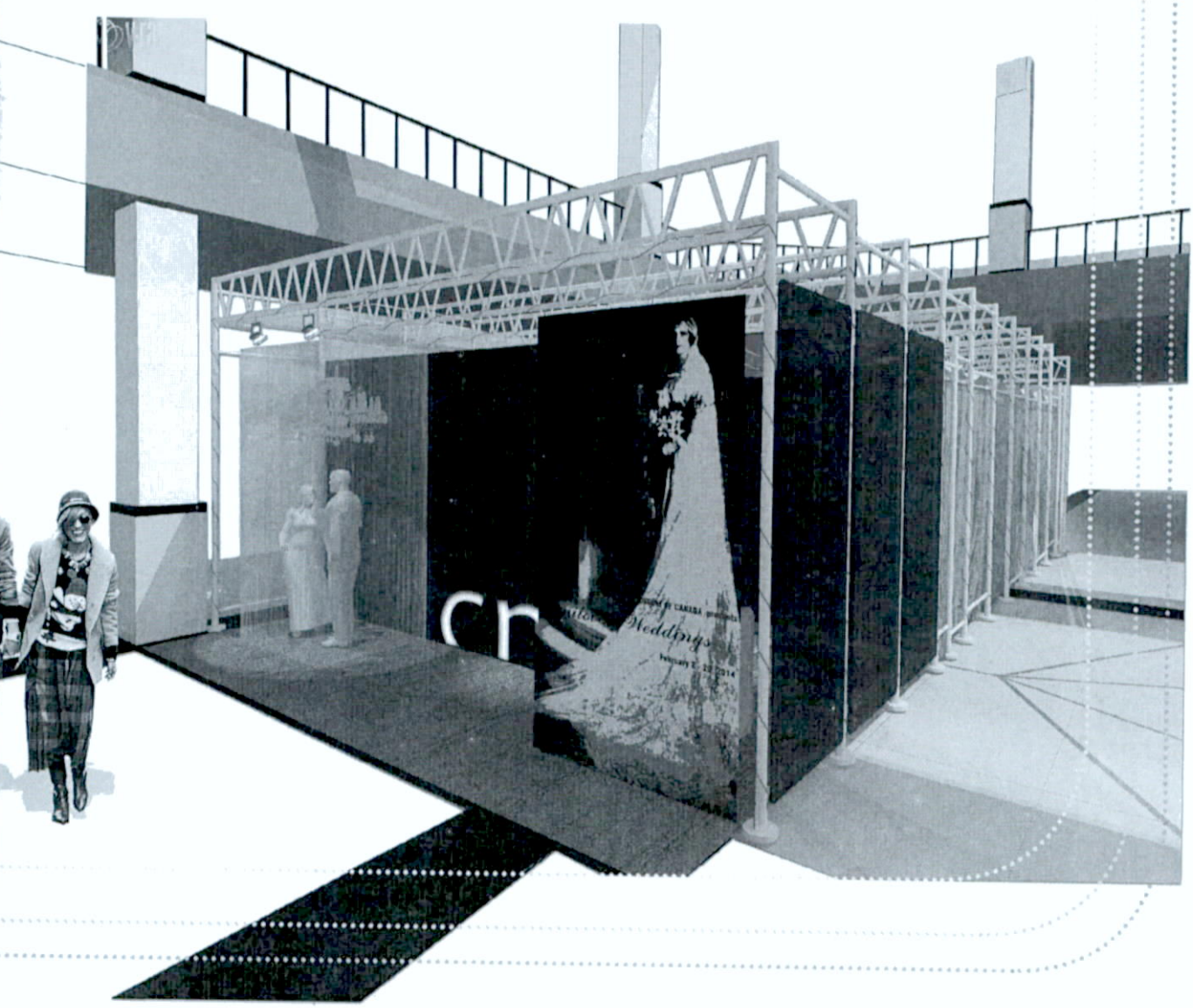
6.3.1 EXHIBITION ENTRANCE



Figure 128: Manitoban Weddings South Elevation

The first experience for mall visitors starts at the entrance. The narrative of bride and groom exchanging rings at the alter is represented by mise-en scene setting. The stage is defined by a white string curtain and the rose petals that are scattered on the floor.

Figure 129: View of Mise-en-scene at entrance



6.3.2 TICKET & INFORMATION DESK AND NARRATIVE PART 1

Then visitors proceed to the ticket desk to buy their tickets from staff located by the ticket desk. In the meantime, they could read, gaze and enjoy projections and get a glimpse of the exhibition from narrative part 1 which is located beside the ticket desk. The didactic panels attached to the exhibit system are used for projections and texts for the exhibition.

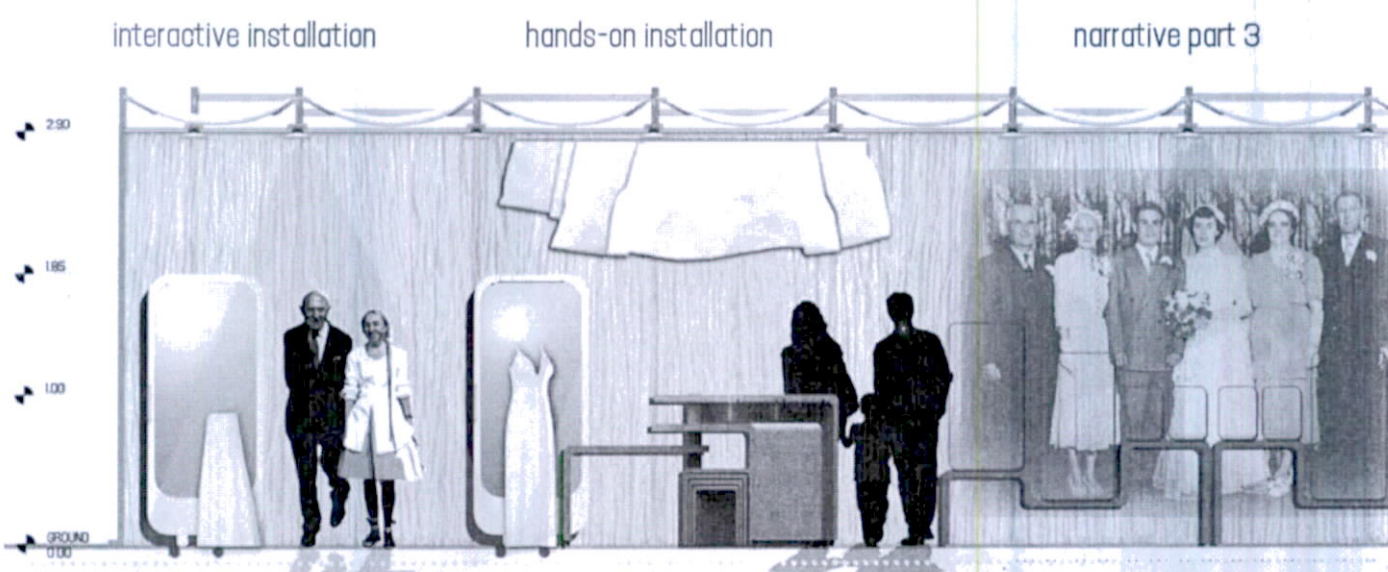


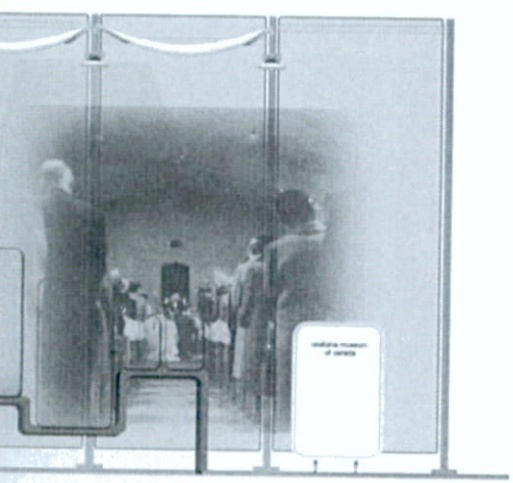
Figure 130: Interior Elevation 1



Figure 131: Ticket & Information Desk and Narrative 1

arrative part 1

ticket &
information desk



6.3.3 NARRATIVE PART 2

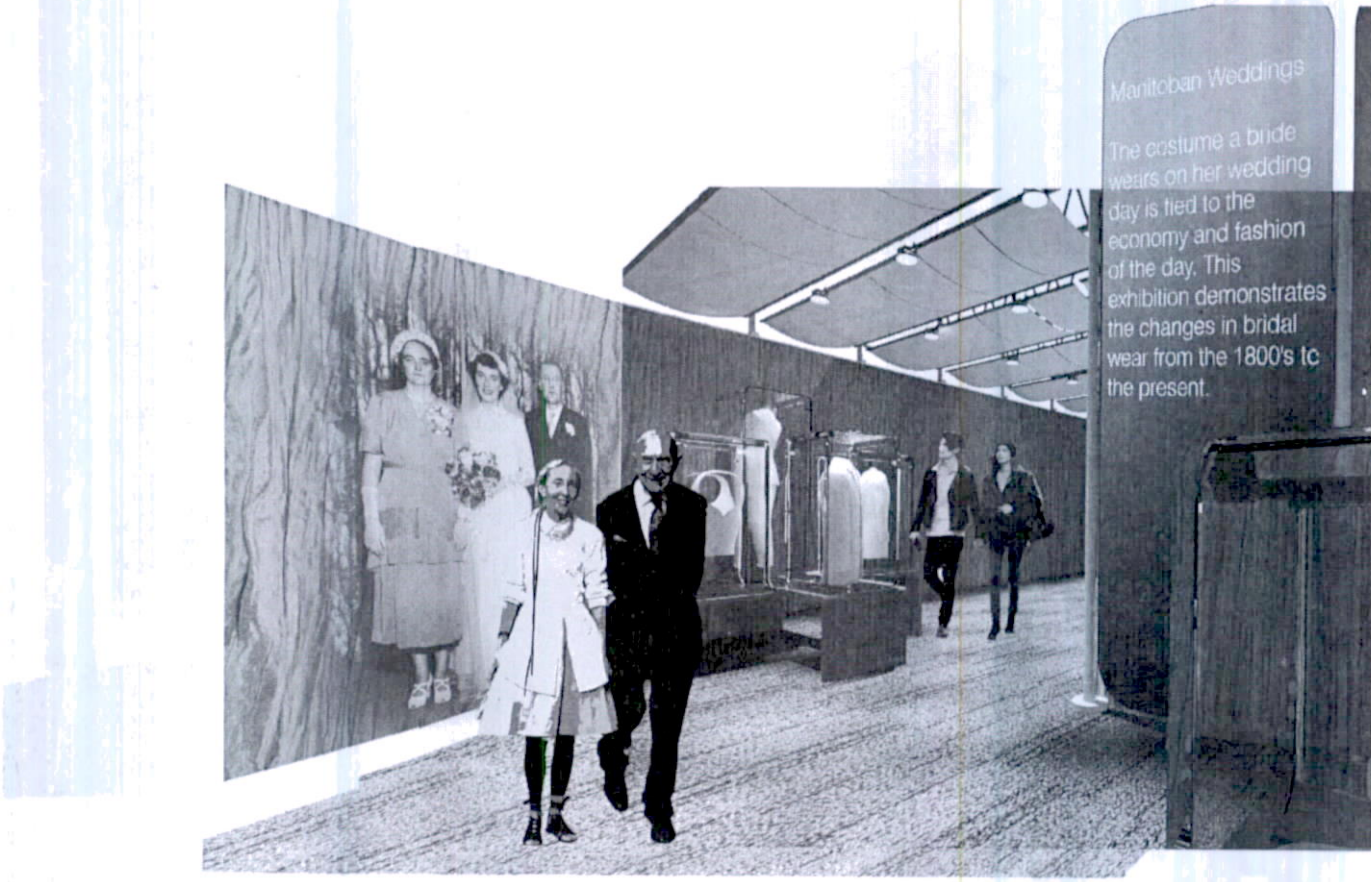


Figure 132: Narrative Part 2



Visitors proceed to the next area to read Manitoban Weddings exhibition information. Clothing offers multiple sensory experiences to its observer. Each display system is designed to form a stage where qualities of the artifacts are clearly showcased.



Figure 133: Narrative Part 2

narrative part 2 interactive installation exit

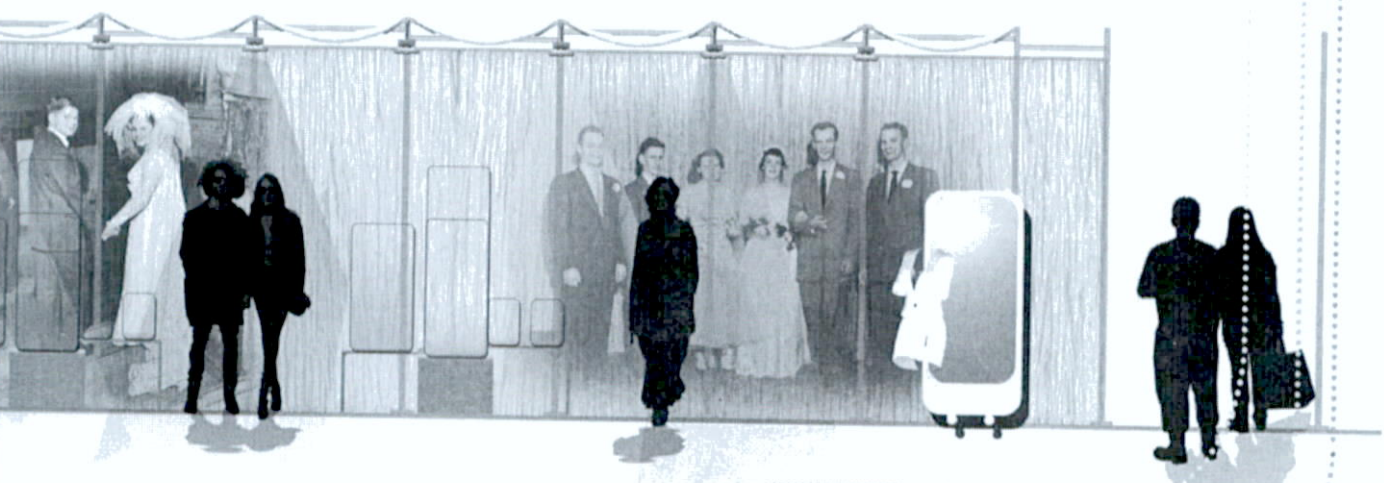


Figure 134: Interior Elevation 2

6.3.4 NARRATIVE PART 3



Figure 135: Narrative Part 3

As visitors proceed through they take turns to gaze at each artifact staged in display boxes. At the same tim visitors are experiencing images of historical wedding photographs and videos that are projected on crea crushed curtain fabric that has a slight lustrous feature and crinkled texture which adds depth and serves mediator between hard surface materials.

The color palette of the overall exhibition creates a subtle neutral background which offers versatile uses f a variety of exhibitions that the museum might wish to curate, and allows for projections to be convenien experienced. The space is illuminated by a fiber optics system which can be adjusted to different hues ar generates no heat. However, in order to stabilize the climatic environment a portable air conditioning syste is used and it is located against the west perimeter of the exhibition. Also the exhibition environment monitored by digital thermometers and hydrometers.



Figure 136: Narrative Part 3

e a theatre people take their place in the space exchanging and sharing the same theatre stage as
ey were actors, reading didactic panels, watching movies and images projected experiencing the
ibition.

ling is fully closed by infusion canopies to create a dramatic environment inside the exhibition. Pink
ts are selected to suggest a more romantic environment to the space and visitors. Empty space
out any lights or In order to reveal beauty of the artifacts, a neutral color palette is selected which is
sists of beige and cream. In contrast to white and black, beige and cream tones allow light to reflect
show as well as not so white that they need to be cleaned each day. Also in order to lower cleaning
od of time.

6.3.5 HANDS-ON INSTALLATION



Figure 137. View of Hands-on Installation

Exhibitions offer informal learning to visitors by showcasing the artifacts, audio, visual and written information as well as activities that involve making. A hands-on installation offers entertaining creative craft activities for the visitors to take home. Each hands-on installation will have different activities. For Polo Park visitors will make their own wedding favors from the materials provided such as ribbons and paper in fabric swatches. The sheer curtain that floats as a skirt is designed to define the perimeters of the exhibition as well as signify the installation.



Figure 138: View of Hands-on Installation

6.3.6 INTERACTIVE INSTALLATION

People like to touch, feel and are tempted to try on artifact pieces. Currently, one of the activities the Costume Museum makes available for its visitors is trying on replica pieces. This elevates the visitor experience by providing interaction with clothing items. Drawing from these ideas, the Traveling Exhibition System offers an installation where the visitor interacts with replica clothing by trying it on. Clothing items are arranged in a way that visitors don't put them on fully but locate themselves in a given space as if they were wearing the clothing and are able to see themselves in the clothing items.

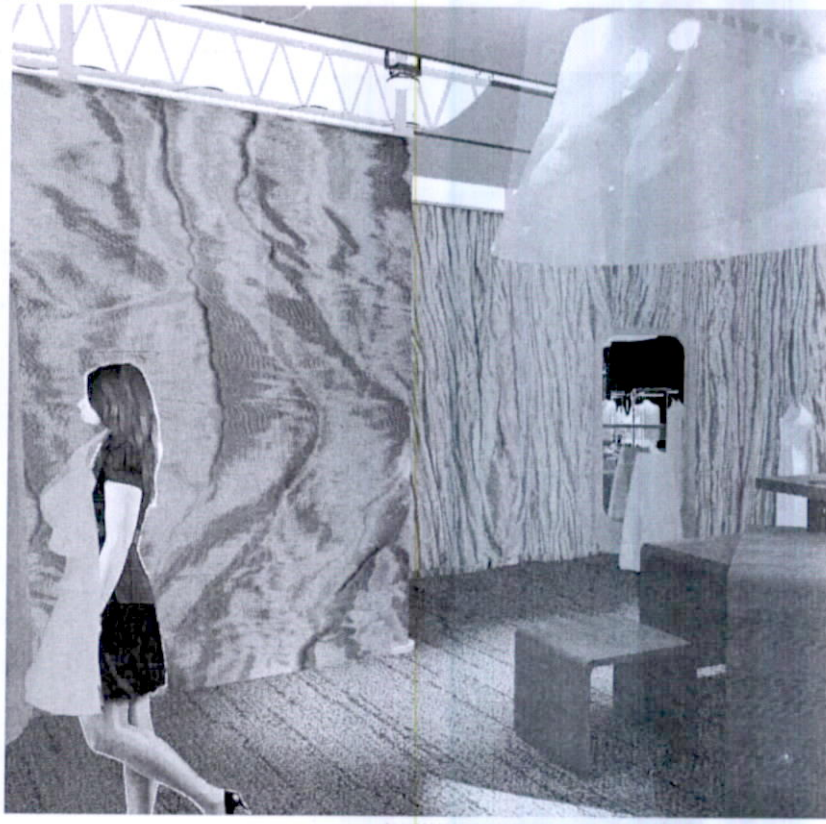


Figure 139. View of Intteractive Installation

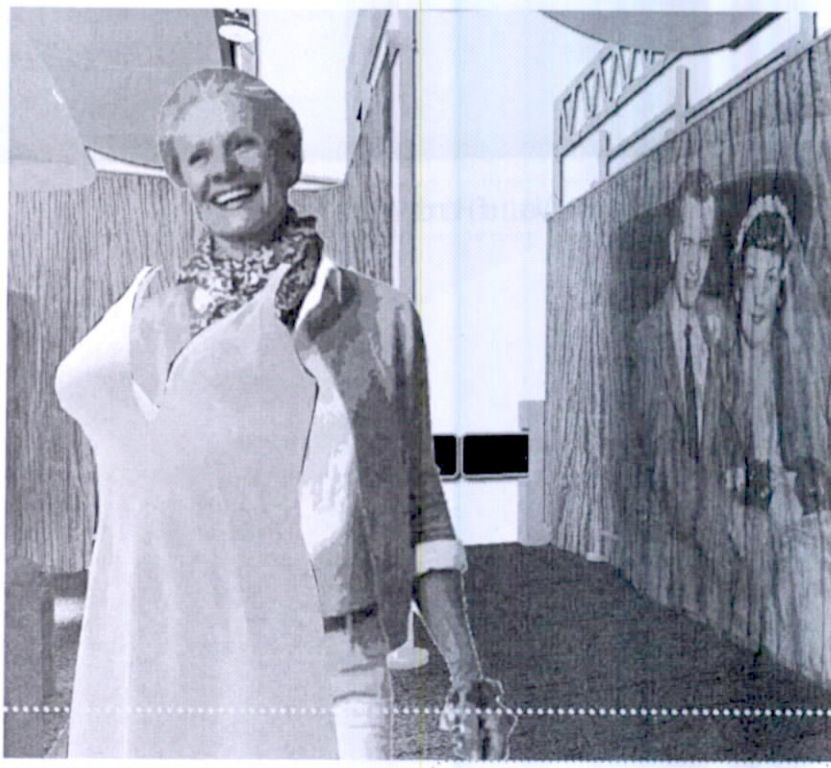


Figure 140. View to exhibition exit

6.3.7 EXHIBITION EXIT

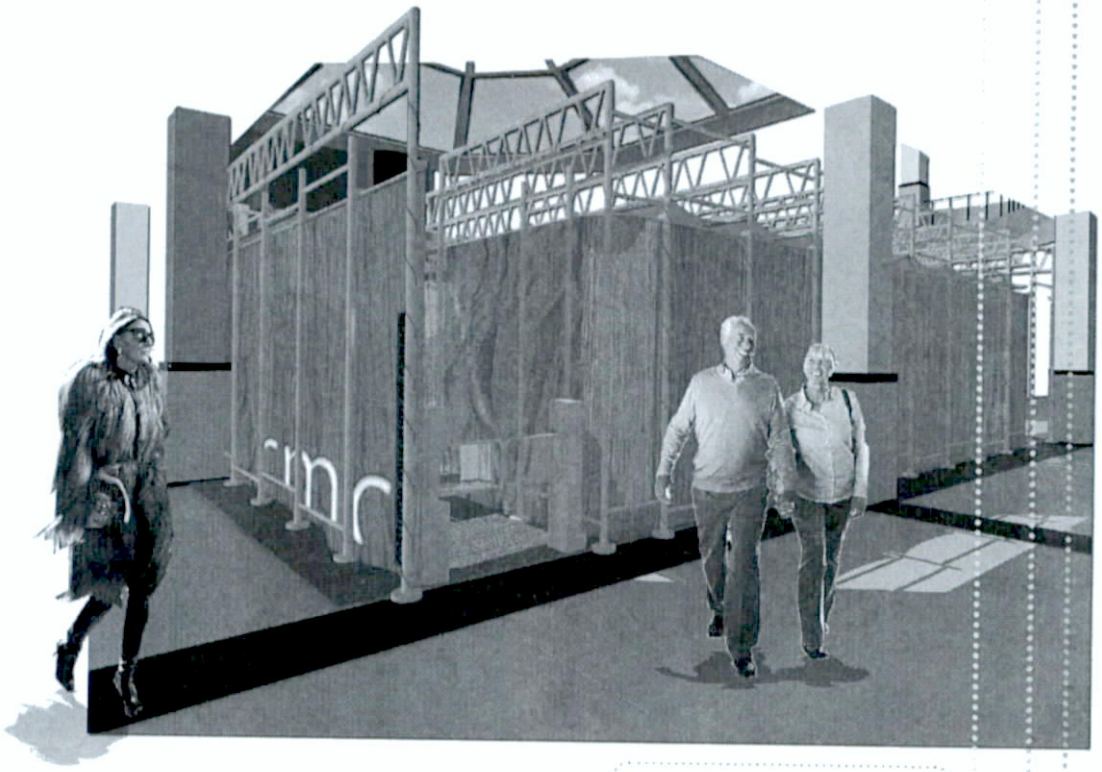


Figure 141: Exit to the mall

After interactive installation people proceed to the exit to the mall by going through a portable turnstile.

6.4 KIT OF PARTS

POST SET

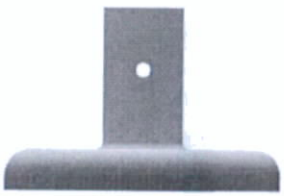


Figure 142: Base Plate



Figure 143: Column



Figure 144: Joiner Type1

TRUSS SET

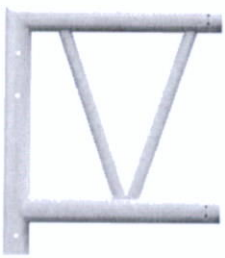


Figure 145: Corner Truss



Figure 146: Truss



Figure 147: Joiner Type2

SIDE SET



Figure 148: Parallel Brace

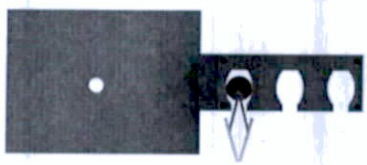


Figure 149: Curtain Cuff



Figure 150: Didactic Panel



Figure 151: Layher Scaffolding Hinged Pin

The Traveling Exhibition System (TES) consists of exhibition furniture as well as the kit of parts. As explained in the design programming, there are three kinds of kits of parts : joint based, panel based, and module based. In order to meet less skilled assembly requirement of the project, the proposed kit of parts of TES is custom designed by means of available guidelines in the literature and practice. In addition, in order to maximize flexibility for various public venues and height I have designed joint based systems. In practice, the most common system available for exhibition and trade shows are portable truss systems. They are portable lightweight and standardized; however, they are bolted to each other so that it requires trained installers. Also, most truss systems are not manufactured to carry spot lighting and projection systems. This result has led me to scaffolding system which is structurally sound and joined with tubes, couplers less skilled assembly being required. As a result, TES has come as a combination of scaffolding and truss systems that will maximize flexibility in layouts, is structurally sound, and less skill is required for assembly. Design proportions for the TES kit of parts are adopted from these two systems and in consultation with structural engineers.

The kit of parts will be manufactured from steel and galvanized to maximize its longevity. Even though there will be initial costs to manufacture the pieces, the longevity of the system will offset the costs. The curtain which forms the walls of the structure is lightweight and will give organic qualities to the in the exhibition design.

6.4.1 CONSTRUCTION DRAWINGS

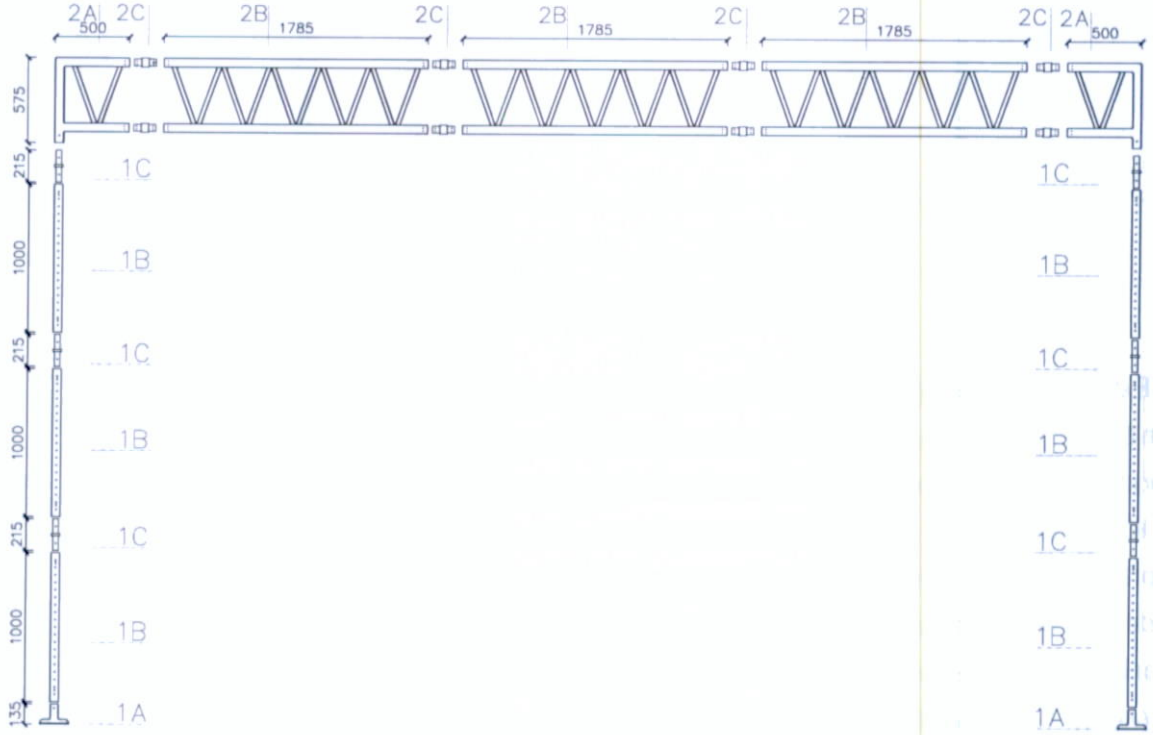


Figure 152: Frame Front Connection, scale 1/50

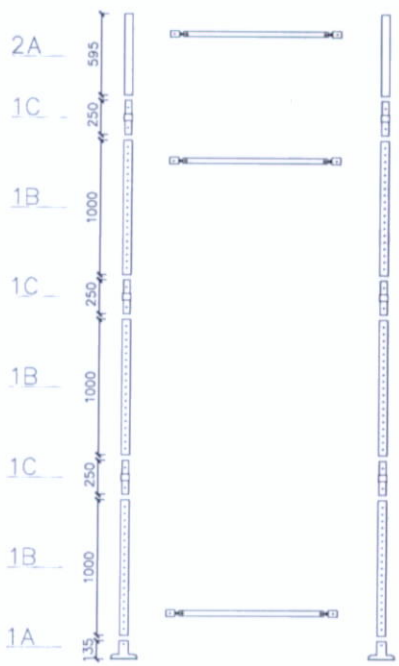


Figure 153: Frame Side Connection, scale 1/50

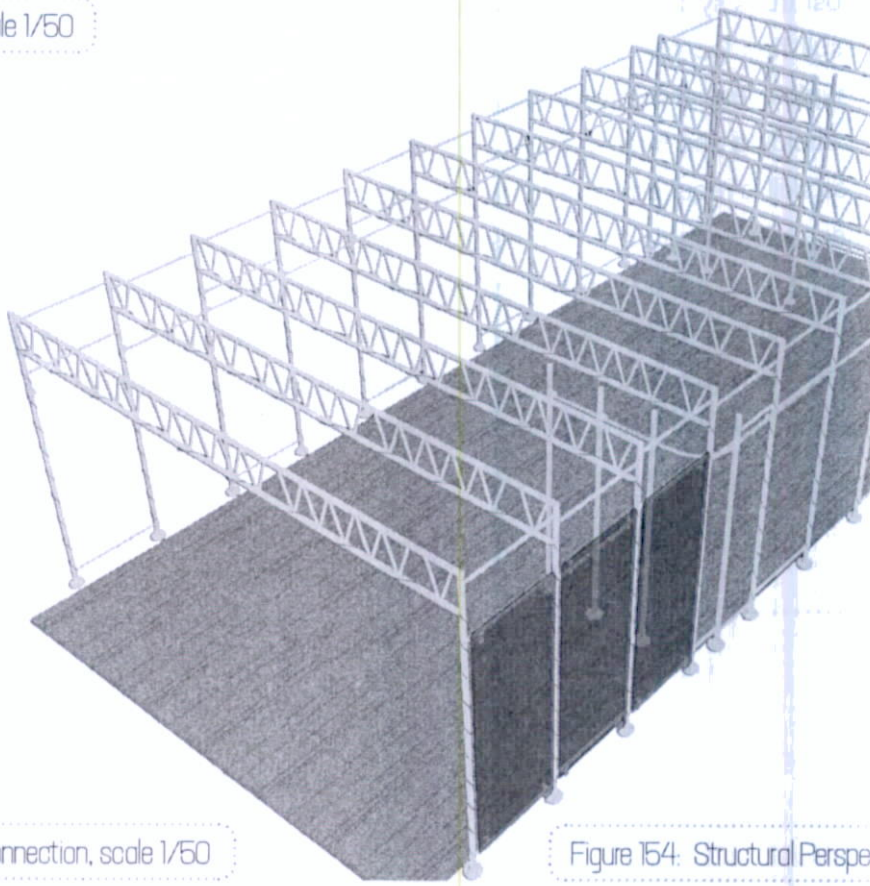


Figure 154: Structural Perspe

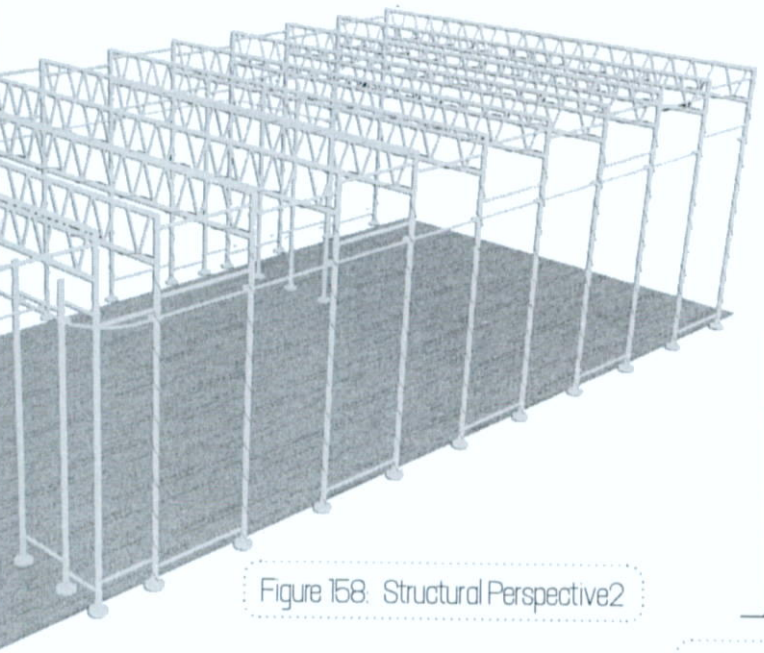


Figure 158: Structural Perspective2

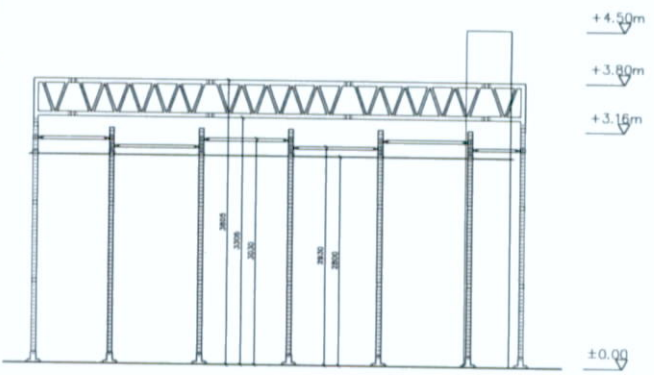


Figure 155: Frame Connection Section C - C, scale 1/50

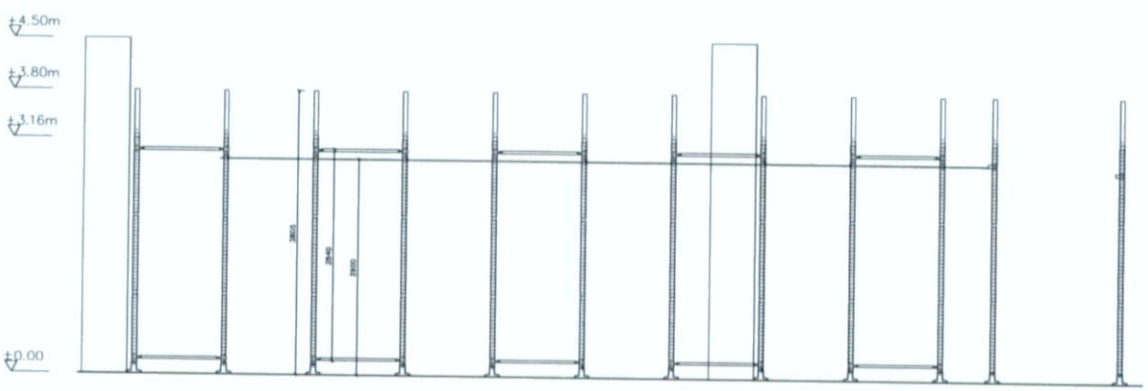


Figure 156: Frame Connection Section A-A scale 1/50

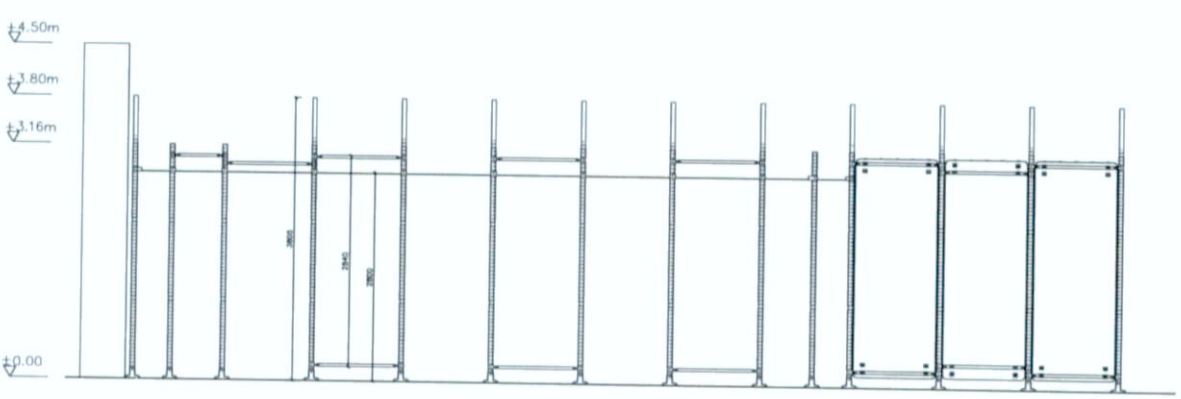


Figure 157: Frame Connection Section B-B, scale 1/50

6.4.2 COMPONENTS OF POST SET



Figure 161.

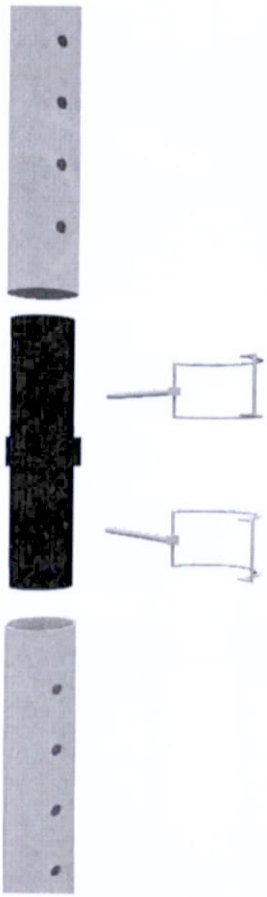


Figure 162.



Figure 163.

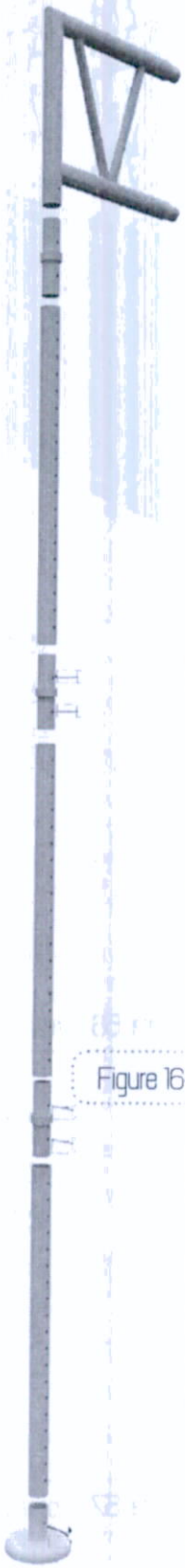


Figure 16

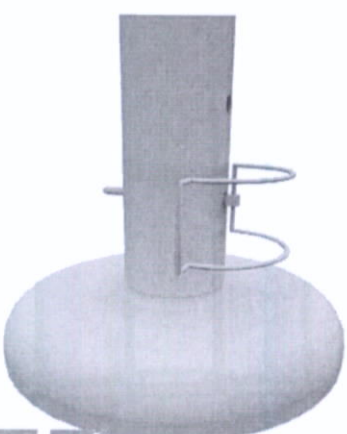


Figure 159.

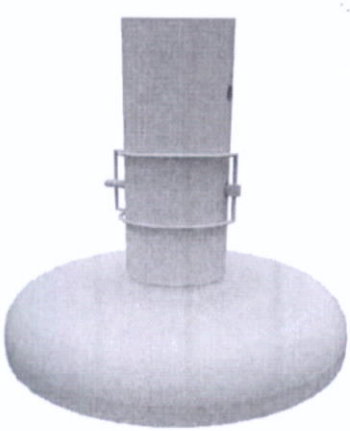


Figure 160.

A - BASE PLATE

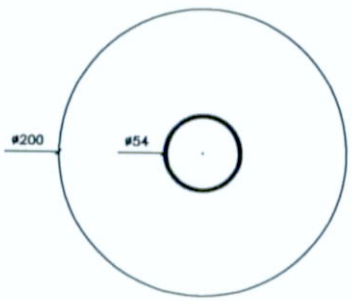


Figure 165: Plan, scale 1/5

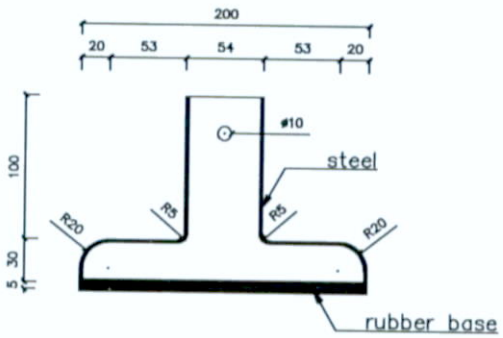


Figure 166: Section, scale 1/5

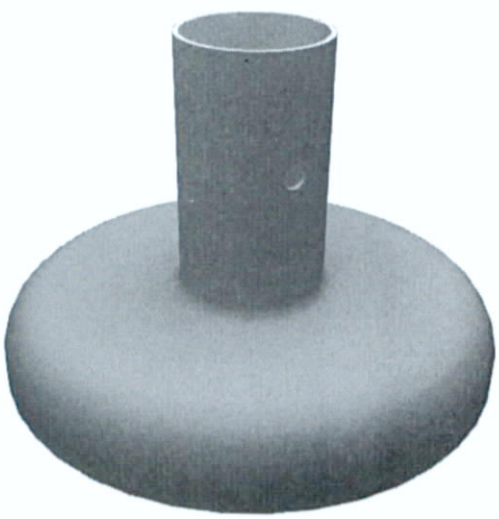


Figure 167: Perspective

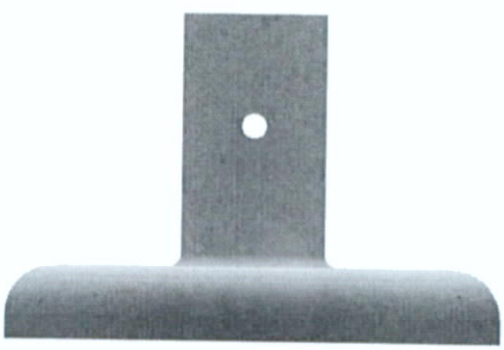


Figure 168: Elevation

FICATIONS

R CODE FOR INSTALLATION	: 1A - BASE PLATE
RIAL	: GREEN
	: STEEL, HOLLOW, GAUGE 2MM
IRE	: ELECTROPOLISHED
	: HOLLOW
	RUBBER BASE GLUED WITH HEAVY DUTY CONTACT CEMENT TO THE STEEL PLATE
HT	: 5 KGS

1B - COLUMN

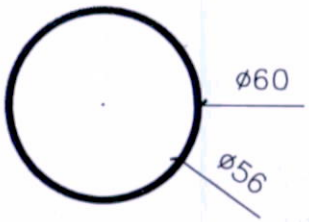


Figure 169: Plan, scale 1/2

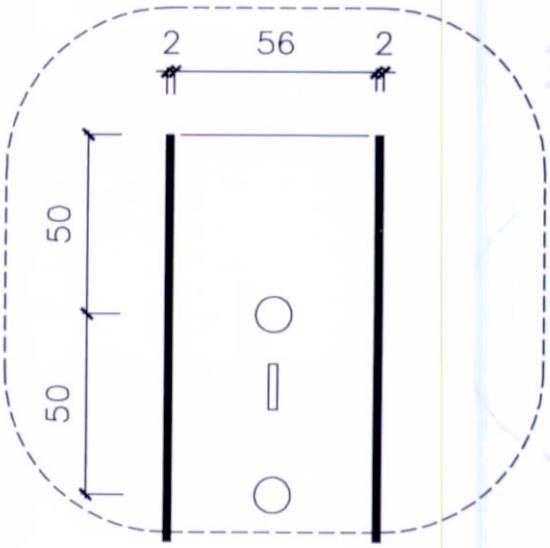


Figure 170: Section detail, scale 1/2

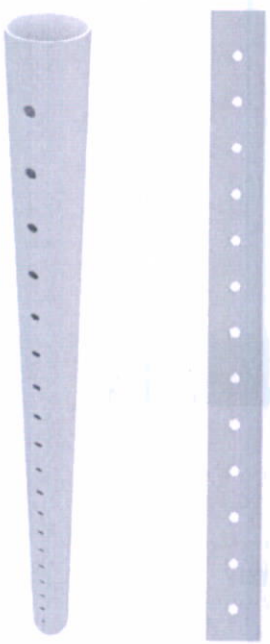


Figure 171: Perspective

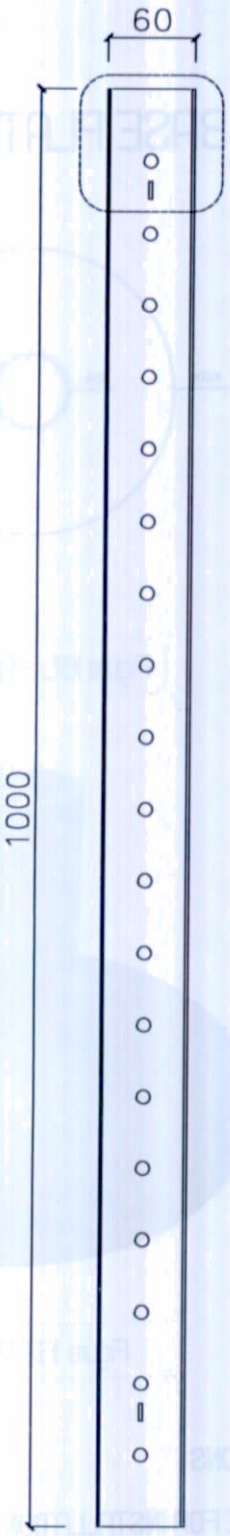


Figure 172: Section, scale 1/5

SPECIFICATIONS

NAME	: 1B - COLUMN
COLOR CODE FOR INSTALLATION	: GREEN
MATERIAL	: STEEL TUBE GAUGE 2MM
FINISH	: ELECTROPOLISHED
WEIGHT	: 2.86 KGS

C - JOINER TYPE 1

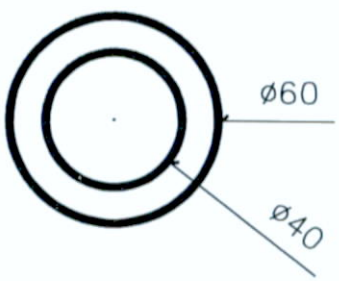


Figure 173: Plan, scale 1/2

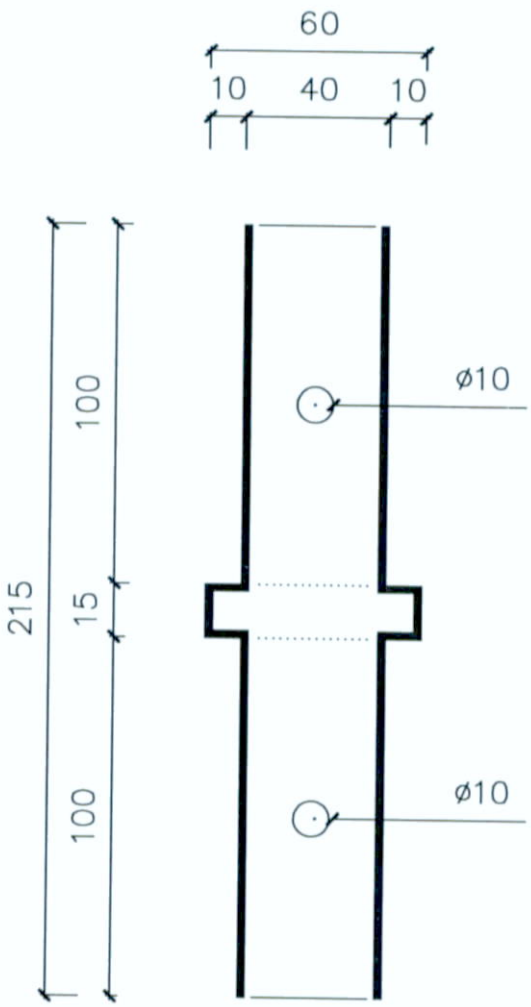


Figure 174: Section, scale 1/2

SPECIFICATIONS

NAME	: 1C - JOINER TYPE1
COLOR CODE FOR INSTALLATION	: GREEN
MATERIAL	: STEEL TUBE, GAUGE 2MM
FINISH	: WHITE HEAT COLORED AND ELECTROPOLISHED
WEIGHT	: 0.44 KGS

6.4.3 COMPONENTS OF TRUSS SET

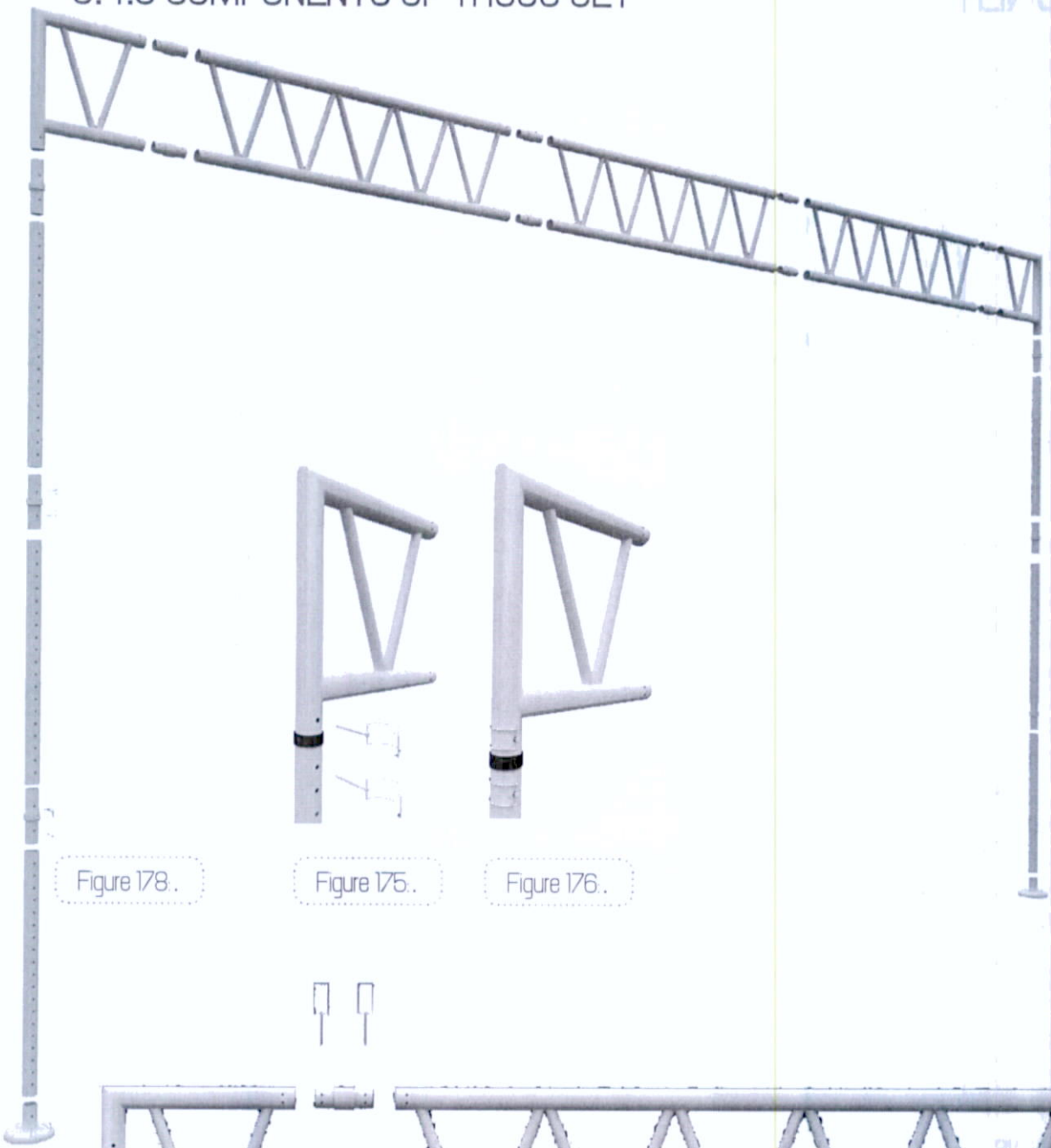


Figure 178.

Figure 175.

Figure 176.

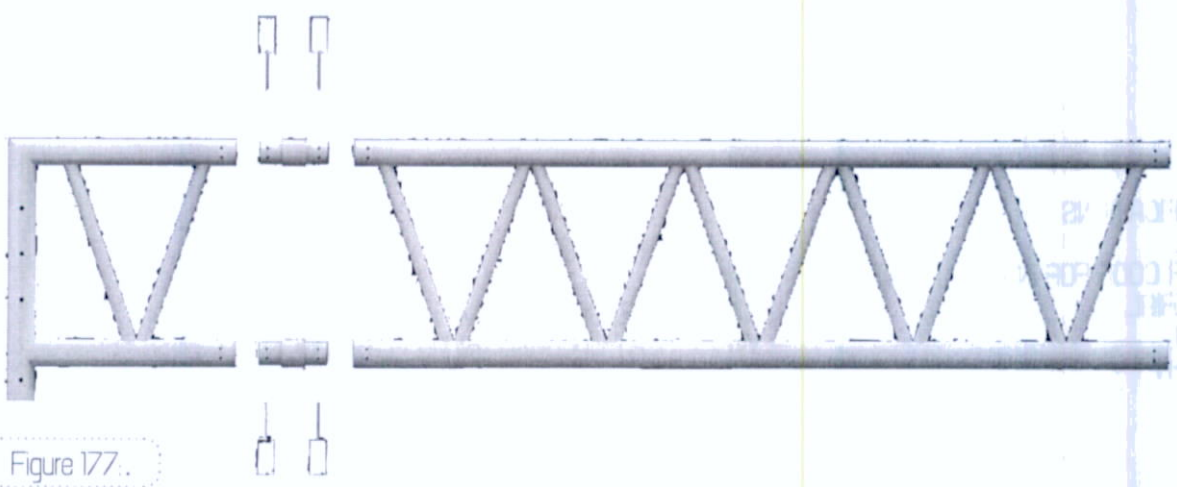


Figure 177.

2A - CORNER TRUSS

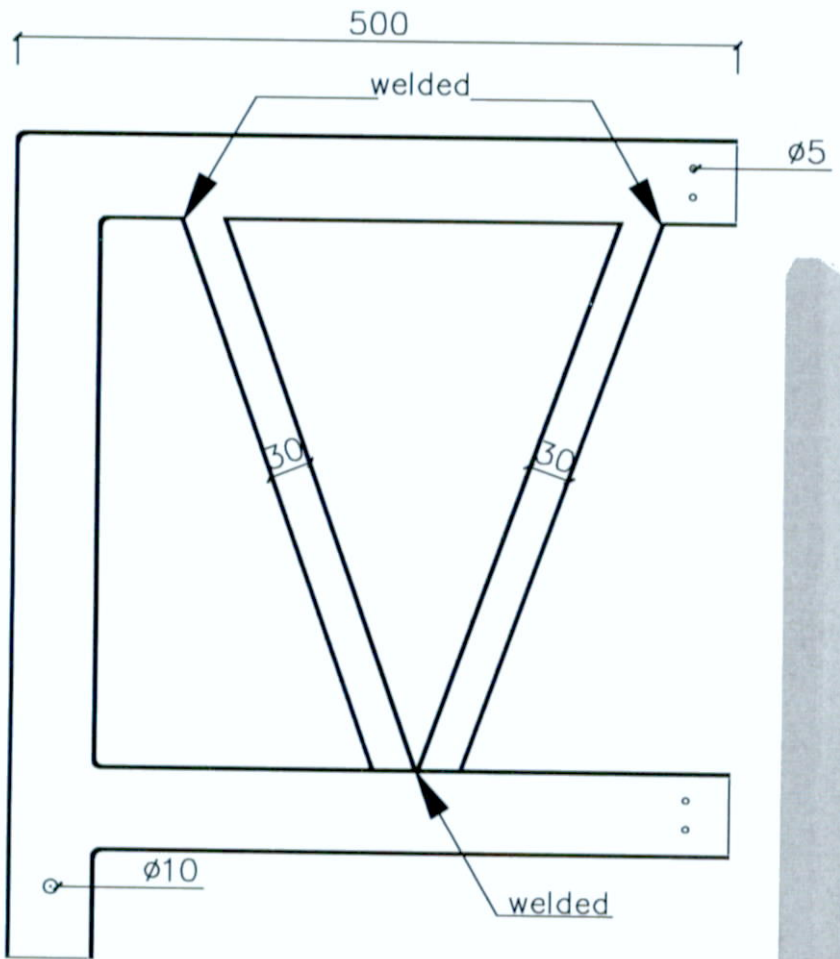


Figure 179: Section, scale 1/5



Figure 180: Perspective

PECIFICATIONS

AME	: 2A - CORNER TRUSS
OLOR CODE FOR INSTALLATION	: RED
ATERIAL	: ALUMNIUM, GAUGE 2MM
EIGHT	: 1.92 KGS

2B - TRUSS BEAM

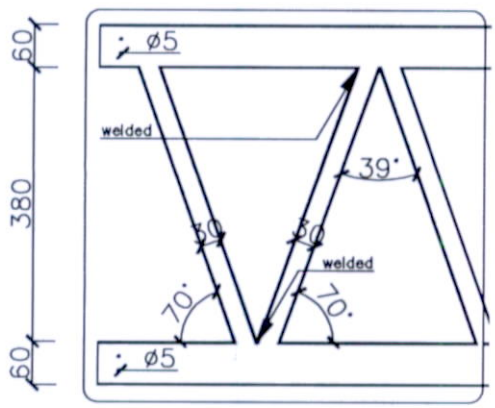


Figure 181: Section detail, scale 1/10

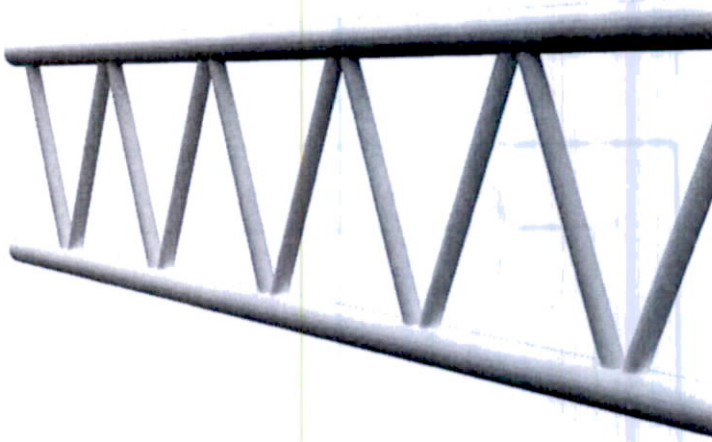


Figure 183: Perspective

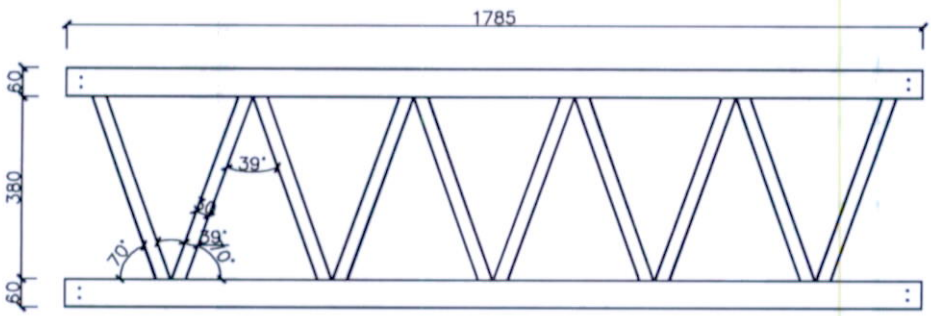


Figure 182: Section, scale 1/15

SPECIFICATIONS

NAME	: 2B - TRUSS
COLOR CODE FOR INSTALLATION	: RED
MATERIAL	: ALUMINIUM TUBE, GAUGE 2MM
FINISH	: WHITE HEAT COLORED AND ELECTROPOLISHED
WEIGHT	: 5.4 KGS

2C - JOINER TYPE 2

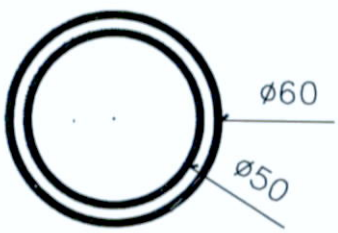


Figure 184: Plan, scale 1/2

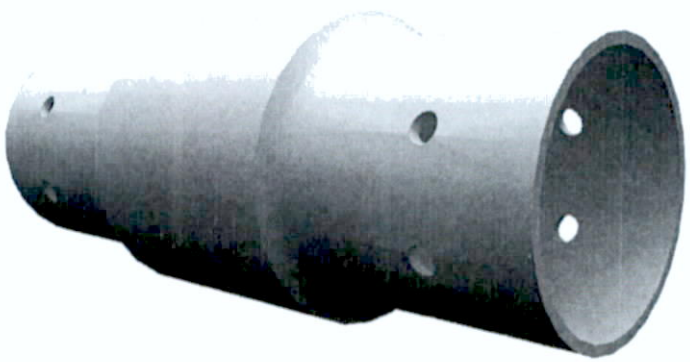


Figure 185: Perspective

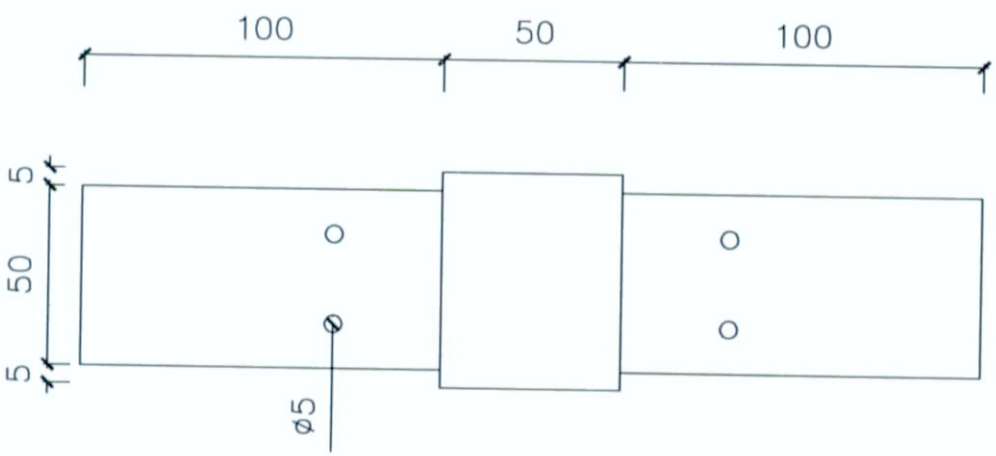


Figure 186: Elevation, scale 1/2

SPECIFICATIONS

NAME	: 2C - JOINER TYPE2
COLOR CODE FOR INSTALLATION	: RED
MATERIAL	: STEEL TUBE, GAUGE 2MM
FINISH	: WHITE HEAT COLORED AND ELECTROPOLISHED
WEIGHT	: 0.49 KGS

6.4.4 COMPONENTS OF SIDE SET

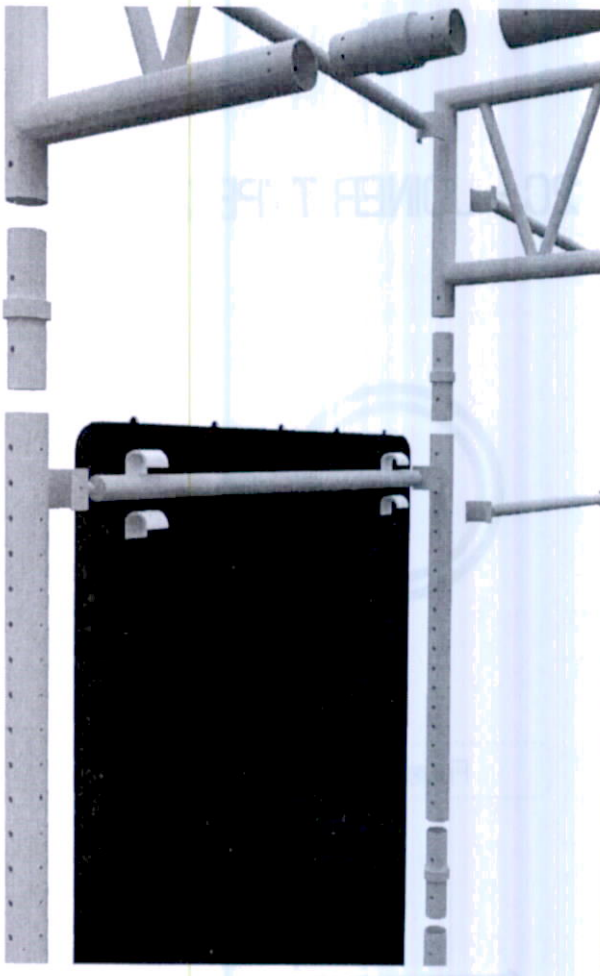


Figure 187. .



Figure 189. .

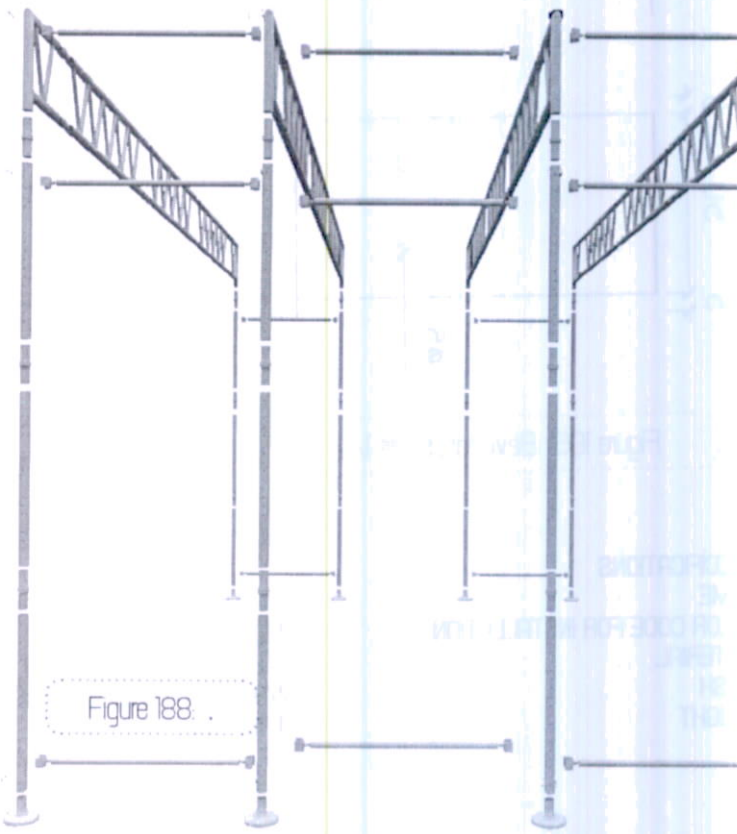


Figure 188. .

3A - PARALLEL BRACE

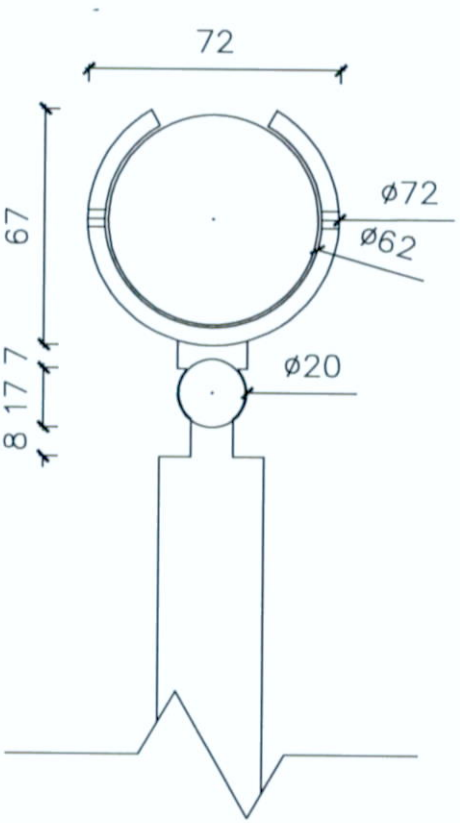


Figure 190: Plan, scale 1/2

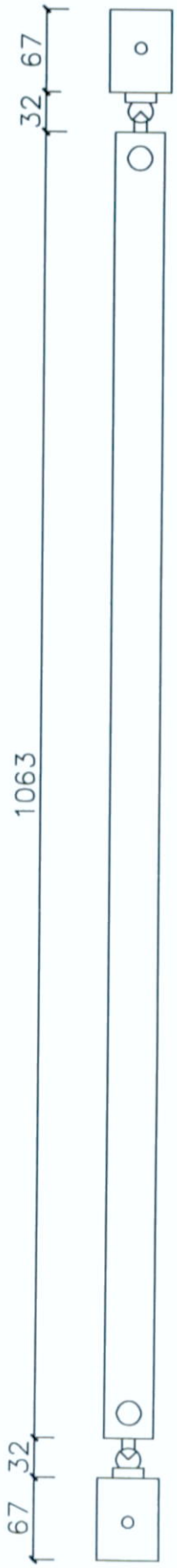


Figure 191: Elevation, scale 1/5

CIFICATIONS
ME : 3A - PARALLEL BRACE
OR CODE FOR INSTALLATION : ORANGE
TERIAL : STEEL
SH : WHITE HEAT COLORED AND ELECTROPOLISHED

3B - CURTAIN CUFF

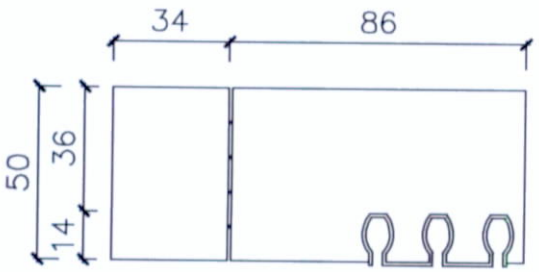


Figure 193: Side Elevation scale 1/2

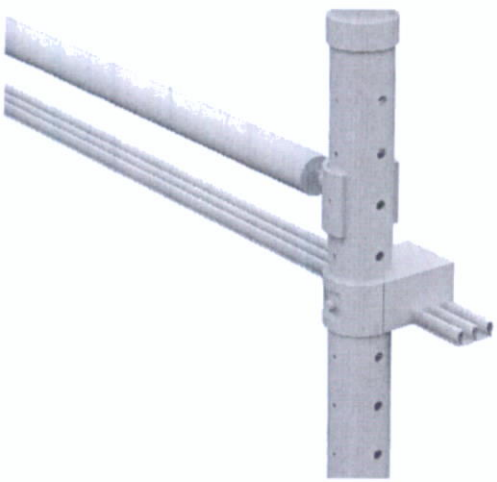


Figure 194: Perspective

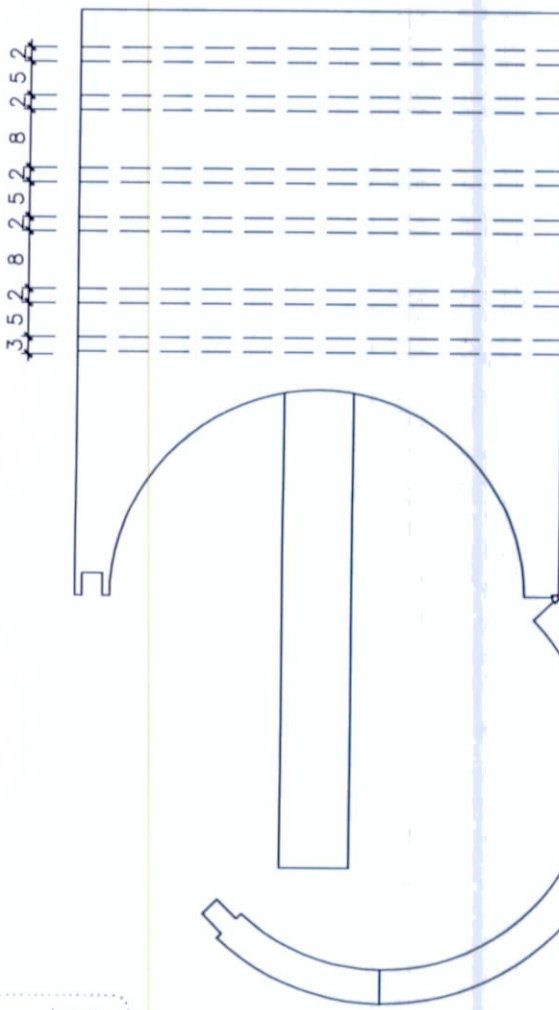


Figure 192: Plan, scale 1/1

SPECIFICATIONS
NAME : 3B - CURTAIN CUFF
COLOR CODE FOR INSTALLATION : ORANGE
MATERIAL : ALUMINIUM

3C - DIDACTIC PANELS

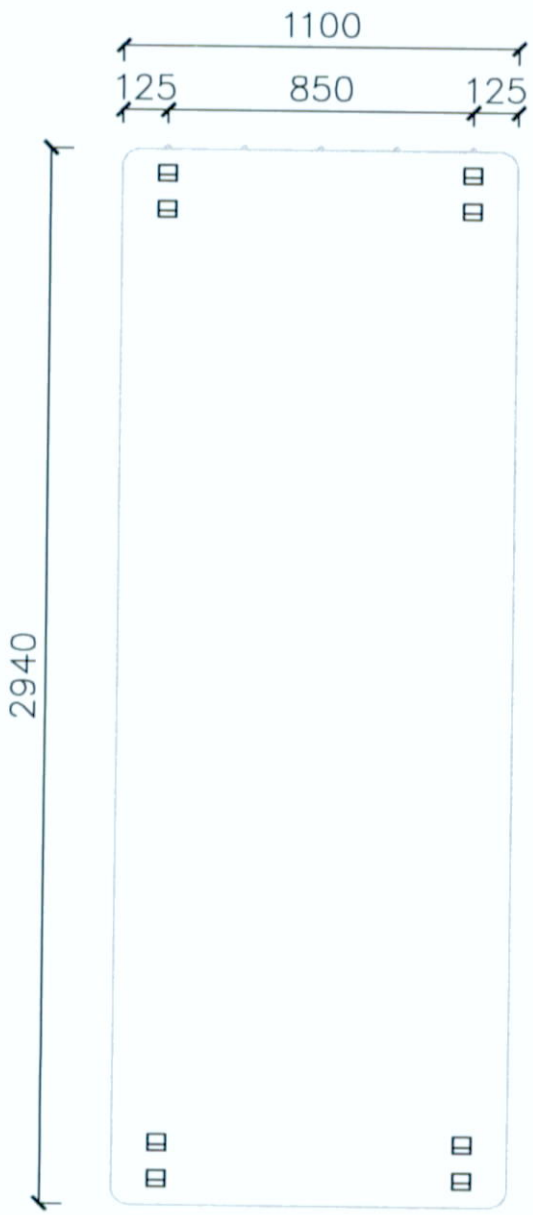


Figure 195: Back Elevation, scale 1/20



Figure 197: Side Elevation, scale 1/20

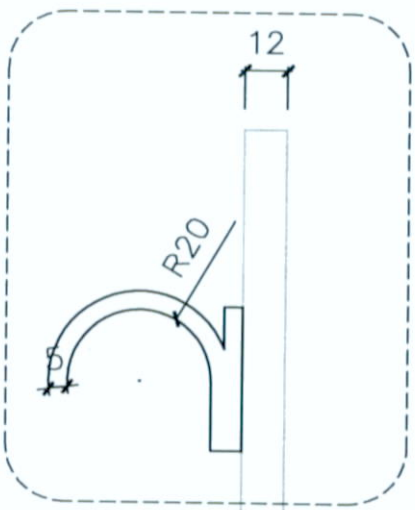


Figure 196: Hook detail, scale 1/2

FICATIONS
R CODE FOR INSTALLATION
RIAL

: 3C - DIDACTIC PANELS
: ORANGE
: ALUMINIUM

6.4.5 STEPS OF SETTING UP Traveling Exhibition System (TES)

STEP 1 : Curator obtains dimensions of the space and starts creating exhibition narrative.

STEP 2 : After narrative is determined, structural layout of the parts and spatial layout of the display systems is calculated.

STEP 3 : Based on dimensions of the space and structural limitations, a final structural layout with curtains and didactic panels are determined.

STEP 4 : Amount of parts and display boxes needed are determined.

STEP 5 : Volunteers are gathered to arrange artifacts, environmental monitoring and control devices in display boxes according to instructions.

STEP 6 : Next, the curator and admin staff prepares didactic panels and placards based on curator's outlined narrative.

STEP 7 : Based on pieces required, a transportation company is arranged to transport items to the exhibition space. The museum arranges trucks in order to transport exhibition furniture and kit of parts seperately.

STEP 8 : Trucks take the items to the space.

STEP 9 : Volunteers unload the trucks and store exhibition furniture and kit of parts seperately to be installed.

STEP 10 : Administration staff organize volunteers into groups as follows: "carpet group", "structure group", "lighting group", and "furniture group" and distributes sets of drawings that indicate the installation sequence and location of the parts as well as green tapes, measurement tapes, and ladders.

STEP 11 : Structure group marks down the grid axis and perimeters of the structure.

STEP 12 : Carpet group starts laying tactile carpet tiles.

STEP 13 : Structure group starts laying down column bases (1A, green coded) on the marked spots.

STEP 14 : Columns (1B, green coded) are joined to base plates (1A, green coded) by means of hinged pins (4A, blue coded).

STEP 15 : First frame is installed as following: one by one, a corner beam (2A, red coded) is joined to the top column (1B, green coded) by means of joiner type1 (1C, green coded) and hinged pin (4A, blue coded).

STEP 16 : Once, one corner beam is connected to the top column, a truss beam (2B, red coded) is joined by means of joiner type2 (2C, red coded) and hinged pin (4A, blue coded).

STEP 17 : Another truss beam (2B, red coded) is joined to the truss beam in Step 16 by means of joiner type2 (2C, red coded) and hinged pin (4A, blue coded).

STEP 18 : Another truss beam (2B, red coded) is joined to the last truss beam in Step 17 by means of joiner type2 (2C, red coded) and hinged pin (4A, blue coded).

STEP 19 : At last a corner beam is joined to the top column by means of joiner type1 (1C, green coded) and to the last truss beam (2B, red coded) in Step 18 by means of joiner type2 (2C, red coded).

STEP 20 : Once, two frames next to each other is installed, parallel bracing (3A, orange coded) is installed to stabilize the structure.

STEP 21 : For the rest of the frame installations, Steps 14 to 20 is repeated. During this process two people and portable ladder are required.

STEP 22 : Structure group starts installing curtain cuffs (3B, orange coded).

STEP 23 : After curtain cuffs installed, plastic flexible curtain tracks are slid through the cuffs to complete curtain loop. Then exhibition curtain is slid in the curtain track.

STEP 24 : The lighting group starts installing fiber optic lighting as follows: the illuminator is located where the electric outlet is convenient. If needed extension cords are used. Then, fiber optics are extended on the frame structures by twisting or using plastic clamps where spot lighting will be installed.

STEP 25 : After installing fiber optics cables, the lighting group starts installing the spot lighting as marked on the drawings.

STEP 26 : After spot lighting is installed, image projecting devices are joined to the fibre optic cables as marked on the drawings.

STEP 27 : Exhibition banner, string curtain, and backdrop curtain are installed on the frames as provided.

STEP 28 : Next, display system type 1, type 2, and hands on desk is brought into the exhibition space by the furniture group.

STEP 29 : Display boxes are carefully slid into the slots on the display system type 1 and type 2. Then, acrylic locking mechanism is slid into the grooves.

STEP 30 : Members of the furniture group hangs hands-on installation curtain on the curtain track attached to the frame.

STEP 31: The furniture group brings interactive installation pieces and ticket desk in to the exhibition space.

STEP 32: All display boxes are connected to the fiber optics illuminator box which is connected to the outlet and portable air-conditioning system is plugged in and started by the lighting group.

STEP 33: The curator comes to see the installation.

These instructions are created based on human resources that the Costume Museum has available.

6.5 ALTERNATIVE EXHIBITION LAYOUTS

6.5.1 ALTERNATIVE LAYOUT 2: "L" TYPE LAYOUT

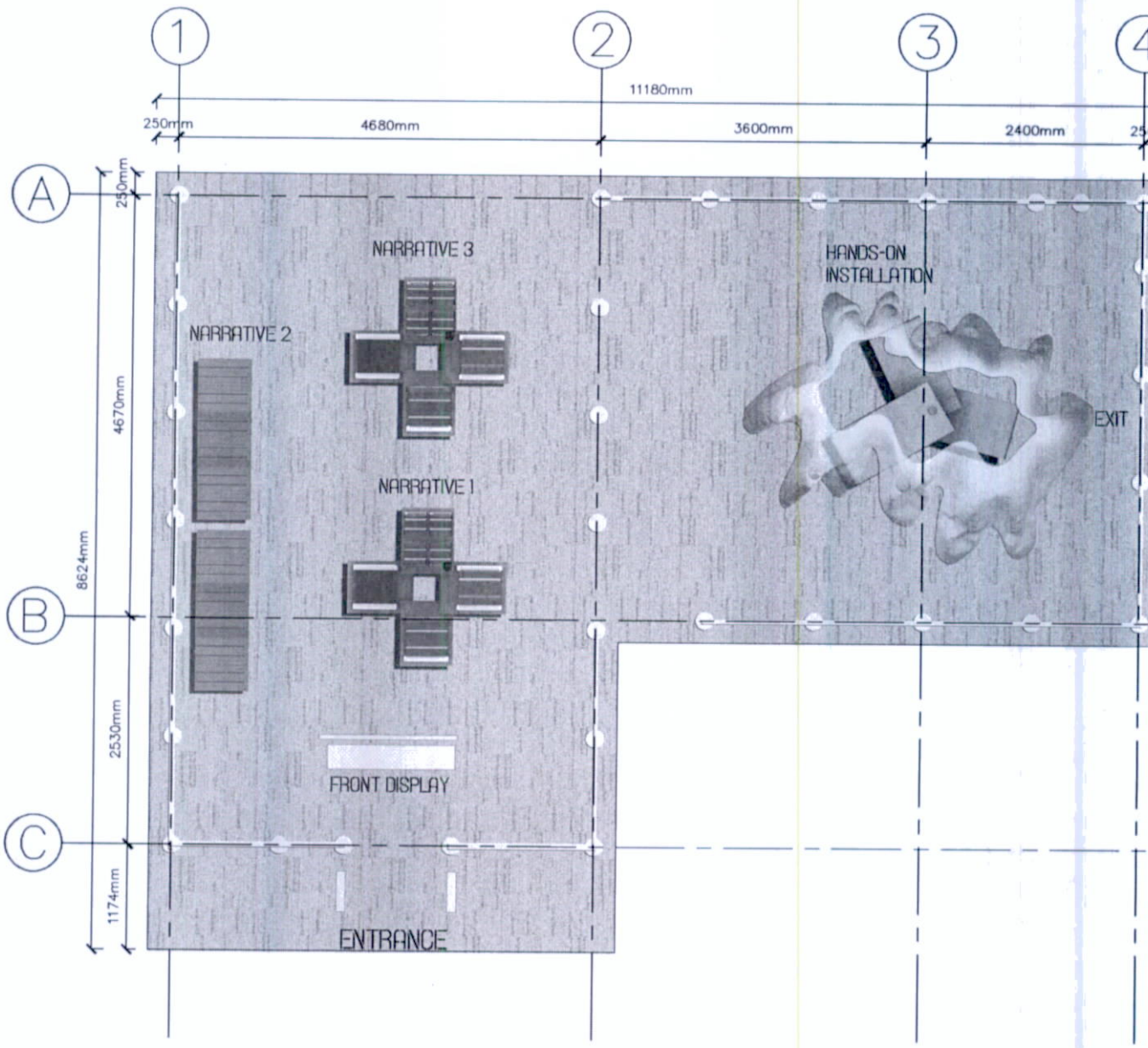


Figure 198: "L" Type Layout Exhibition Plan

60 square meter L type configuration accommodates 4 display systems, 14 display boxes, and a hands-on installation. The visitor capacity is 26 at one time in the exhibition space.

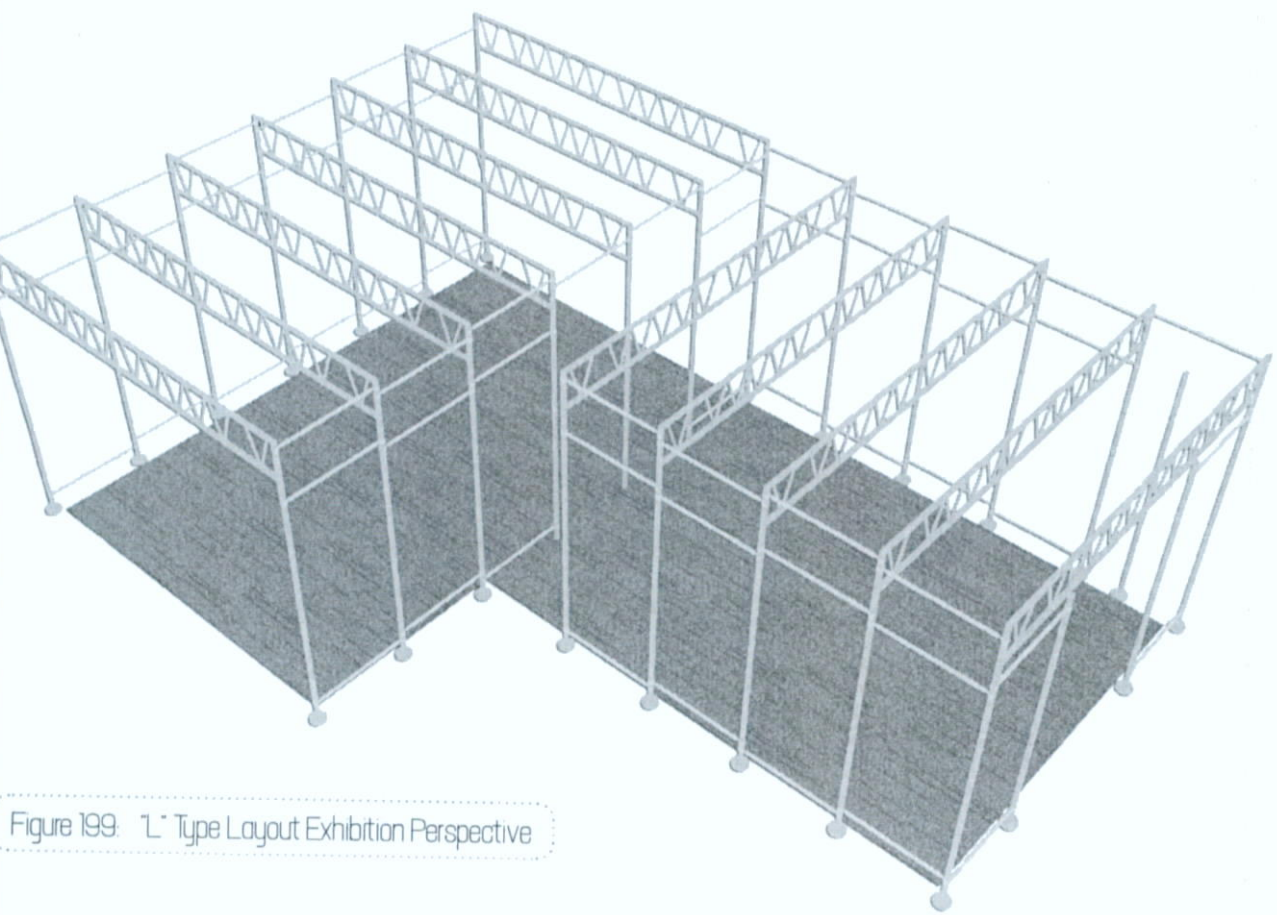


Figure 199: "L" Type Layout Exhibition Perspective

6.5.2 ALTERNATIVE LAYOUT 3: "T" TYPE LAYOUT

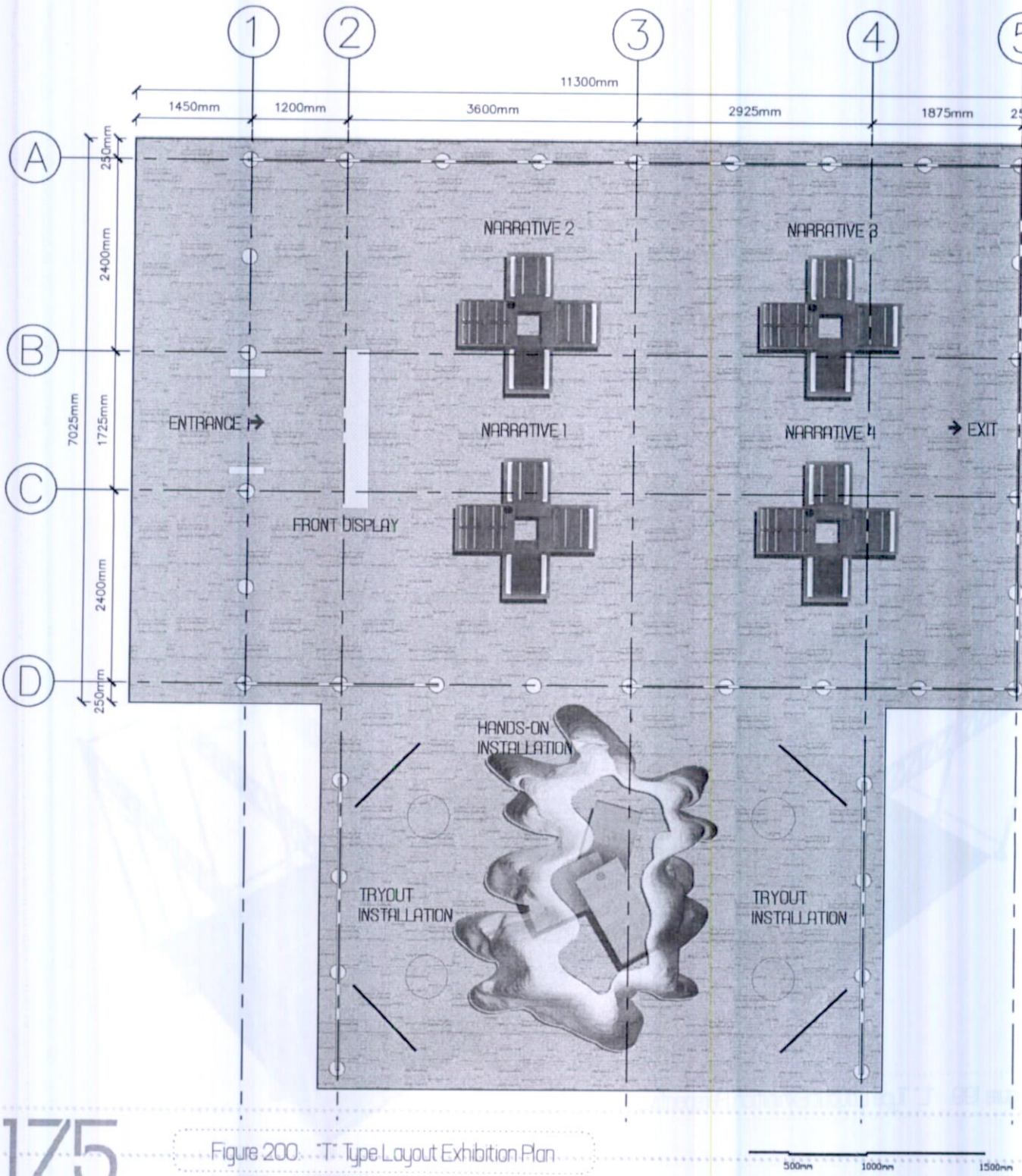


Figure 200 "T" Type Layout Exhibition Plan

100 square meter T type configuration accommodates 4 display systems, 16 display boxes, and a hands-on installation. The visitor capacity is 40 at one time.

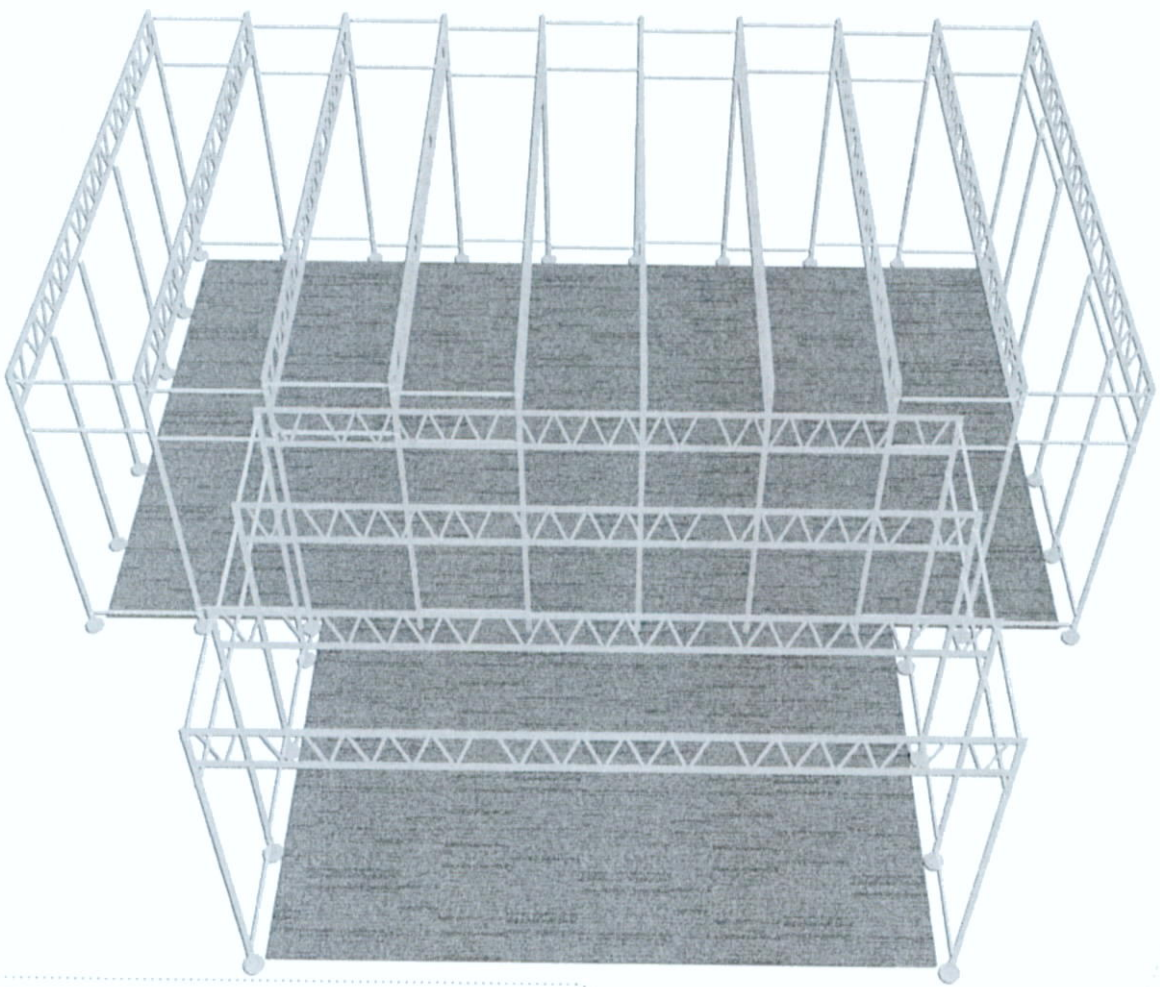


Figure 201: "T" Type Layout Exhibition Perspective

6.5.3 ALTERNATIVE LAYOUT 4: "NARROW U" TYPE LAYOUT

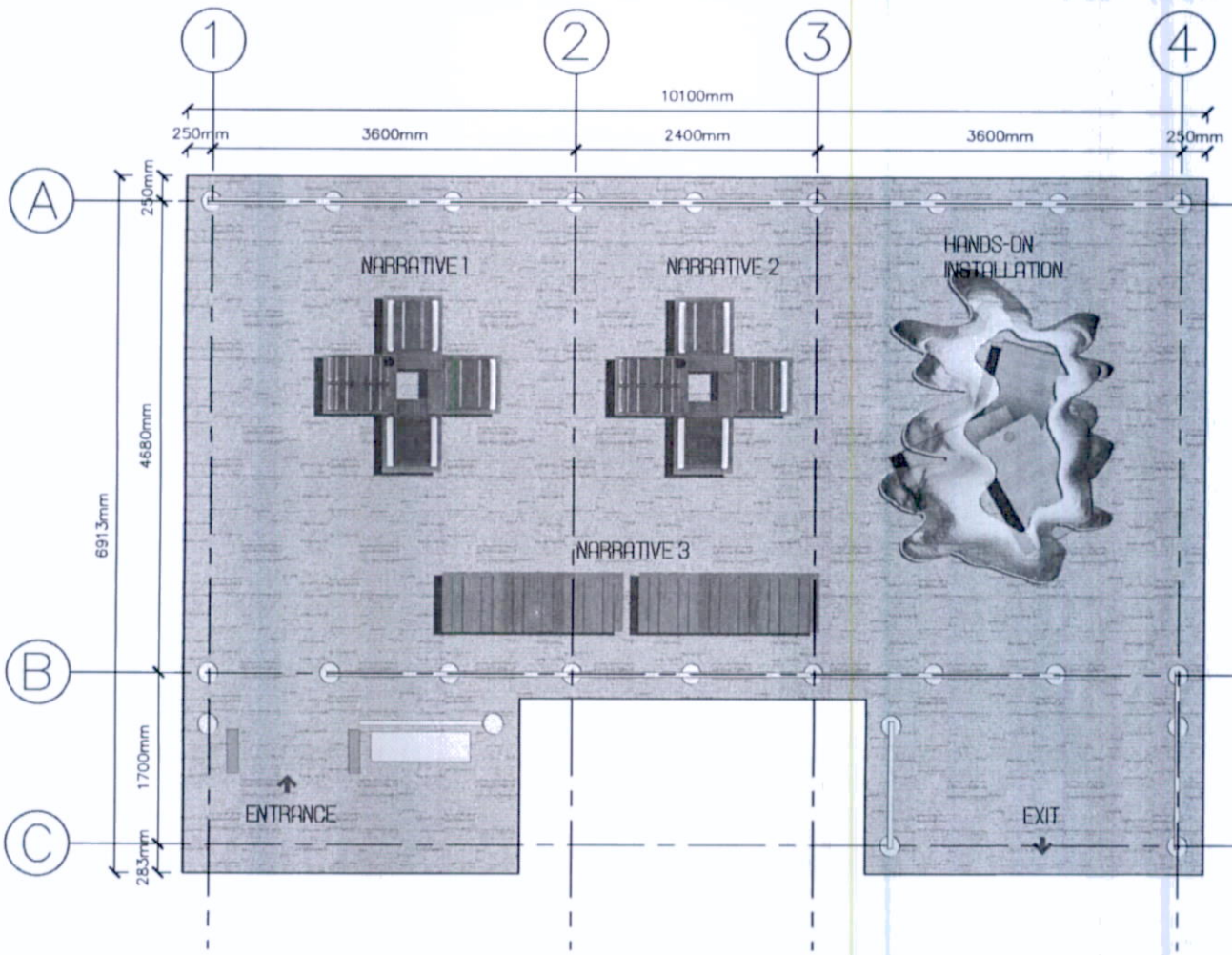


Figure 202: "Narrow U" Type Layout Exhibition Plan

54 square meter Narrow U type configuration accommodates 4 display systems, 14 display boxes, and a hands-on installation. The visitor capacity at one time is 22.

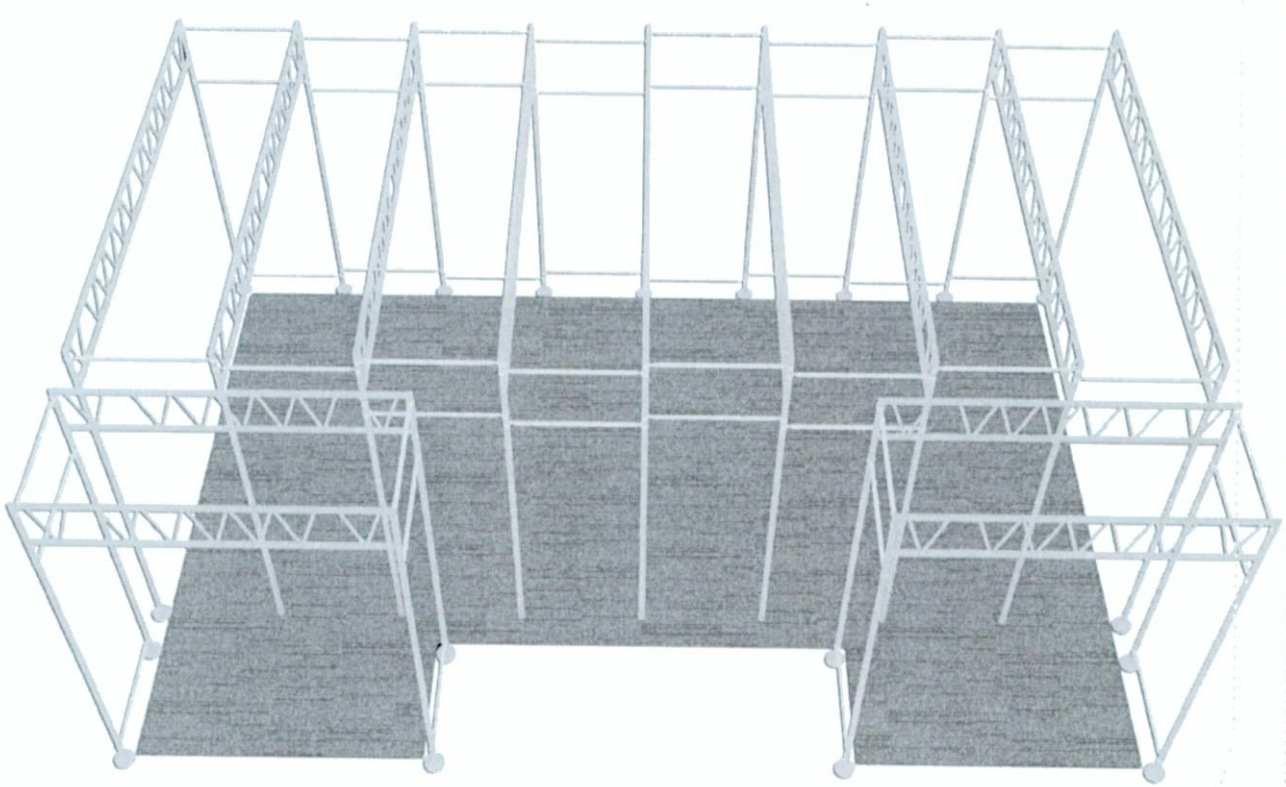


Figure 203: "Narrow U" Type Layout Exhibition Perspective

6.5.4 ALTERNATIVE LAYOUT 5: "WIDE u" TYPE LAYOUT

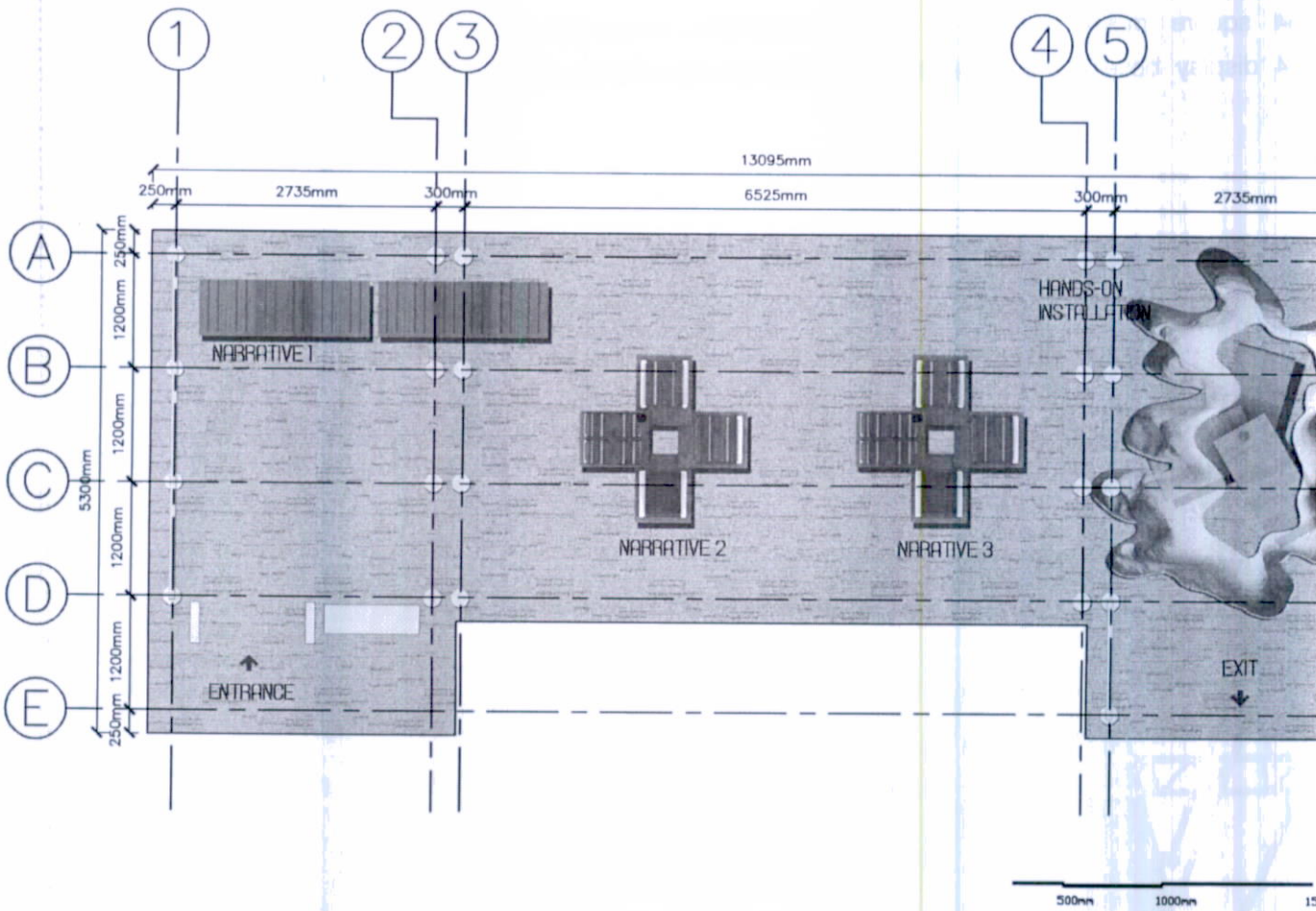


Figure 204: "Wide U" Type Layout Exhibition Plan

50 square meter Wide U type configuration accommodates 4 display systems, 14 display boxes, and a hands-on installation. The visitor capacity is 20 people at one time.

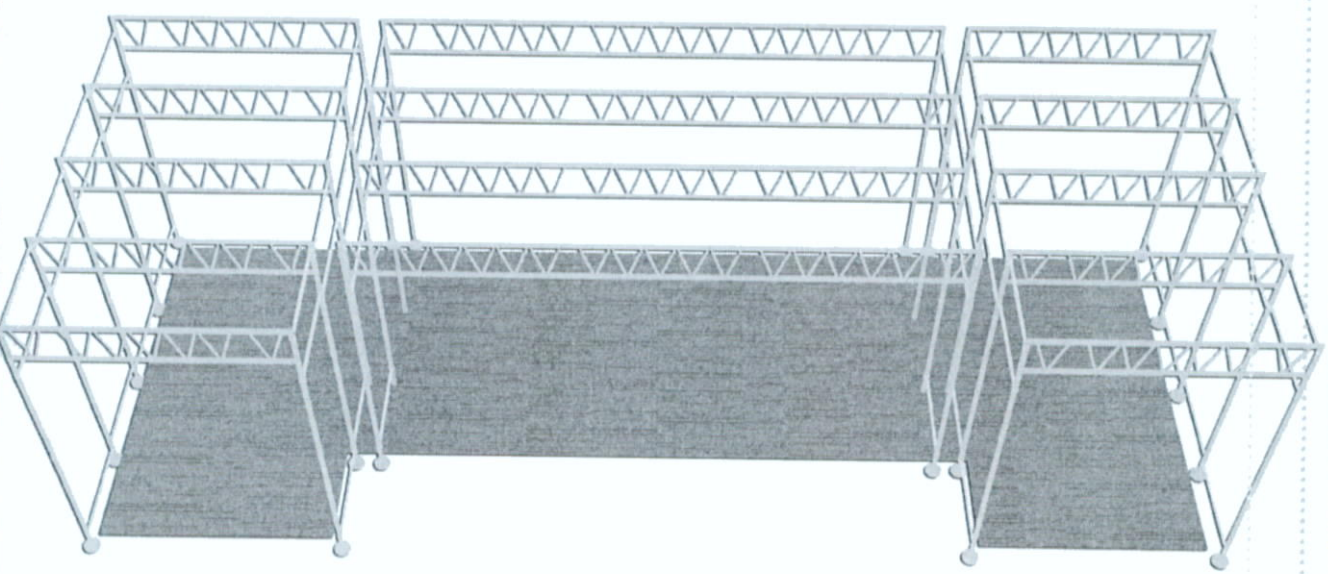


Figure 205: "Wide U" Type Layout Exhibition Perspective

6.6 EXHIBITION FURNITURE

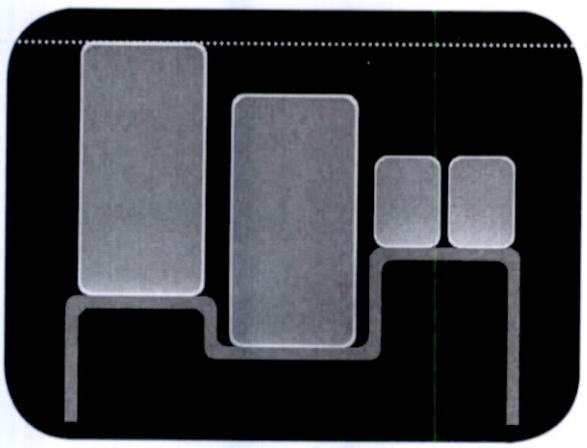


Figure 206. A. Display Boxes

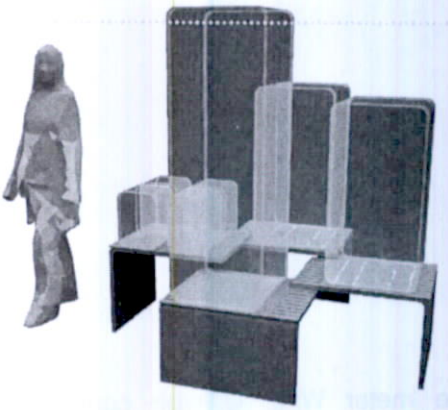


Figure 208. B. Display Systems

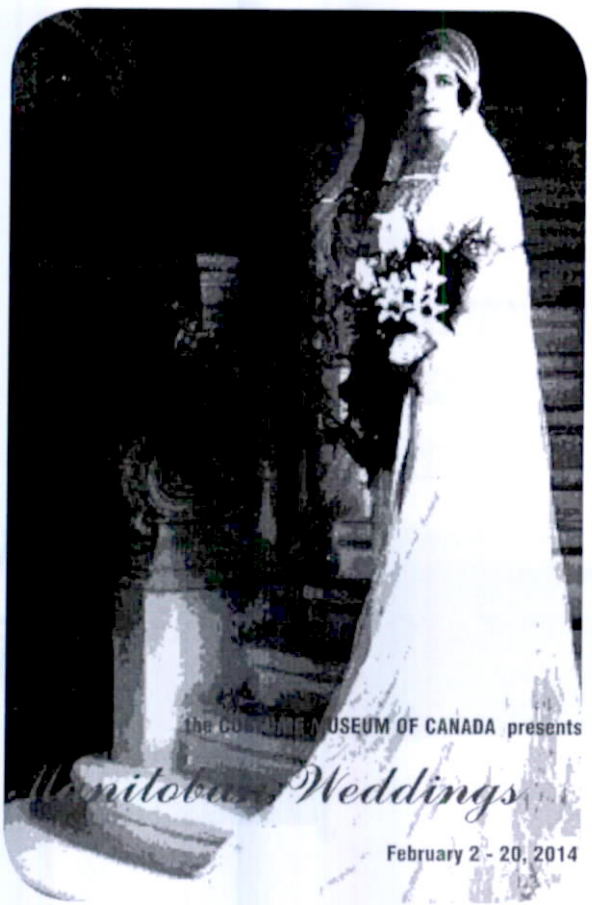


Figure 207. E. Exhibition Banner

Exhibition furniture is designed to be reused for exhibitions staged by the Costume Museum. These portable pieces are designed based on the criteria set in the design programming: environmental controls, security, cost effectiveness, lightweight, and long term and versatile use. The design also offers neutral and modern design elements that are key to staging clothing artifacts.

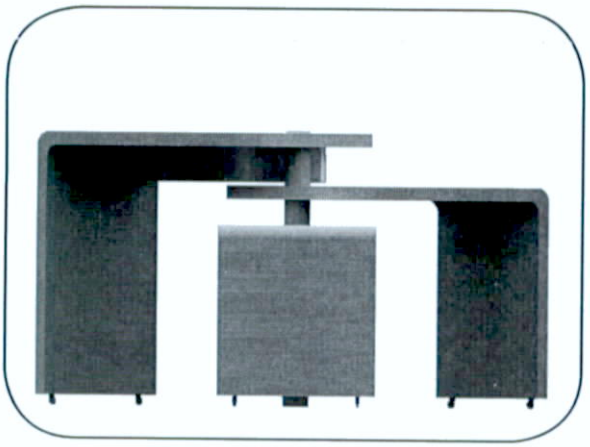


Figure 209.. C. Hands-on Table and Nested Stools

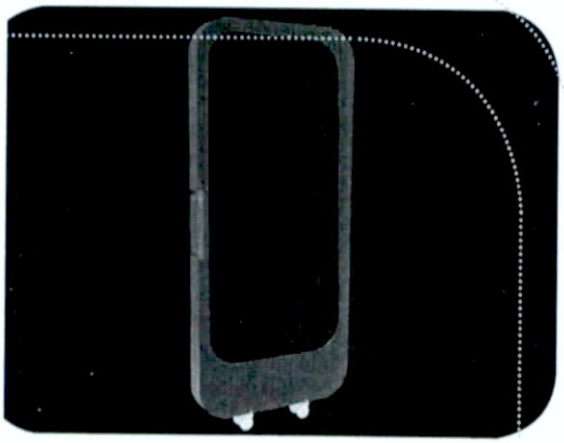


Figure 211.. D. Interactive Installation Mirror

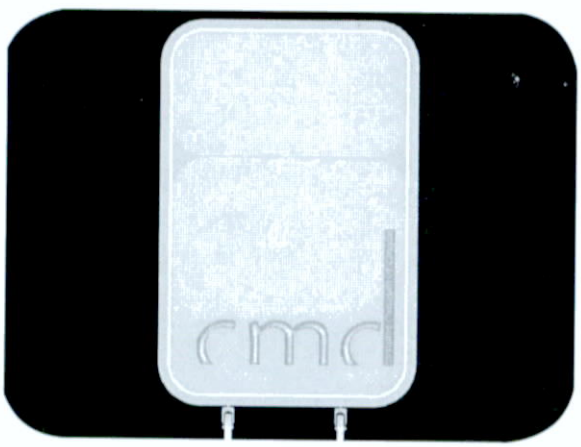


Figure 210.. F. Ticket and Information Desk

6.6.1 DISPLAY BOXES

SMALL DISPLAY BOX





Figure 212.

Display boxes establish the design language for all exhibition furniture design. Traveling as both concept and activity is strongly connected to the ability and ease to move. As an activity it suggests packing belongings in suitcases or bags that are lightweight, portable and standardized sizes to be accommodated in the spaces determined. Small display boxes will be used for artifacts such as jewellery, hats, shoes, and small items.

MEDIUM DISPLAY BOX

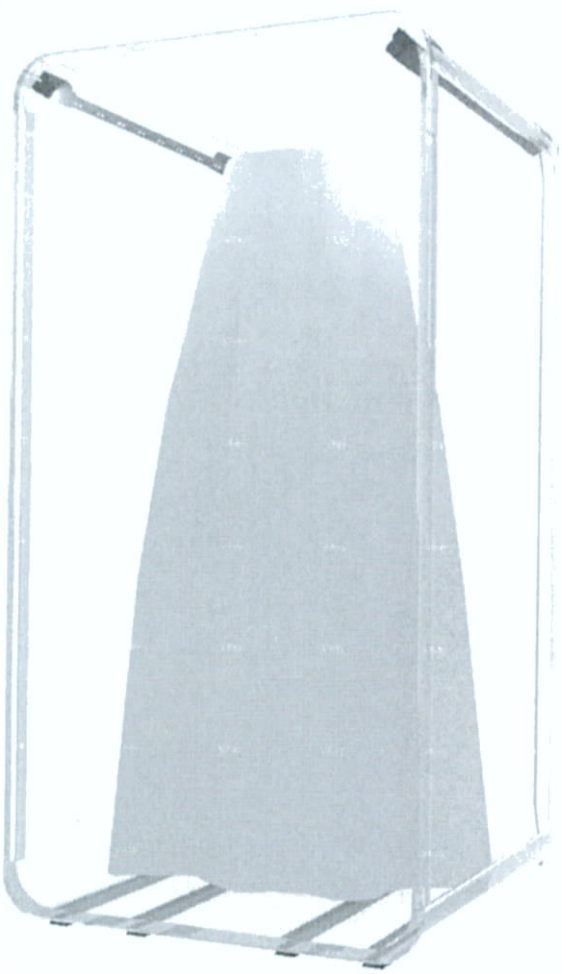


Figure 213.

Expanding on the concept of suitcases, the display box design becomes a tool (enclosed space) to transport, to display and to protect garments. There are three display boxes: small, medium, and large. The size of the boxes are determined based on the approximate dimensions of the artifacts: a medium unit can accommodate hat, shoes, skirts, jackets, and blazers.

LARGE DISPLAY BOX

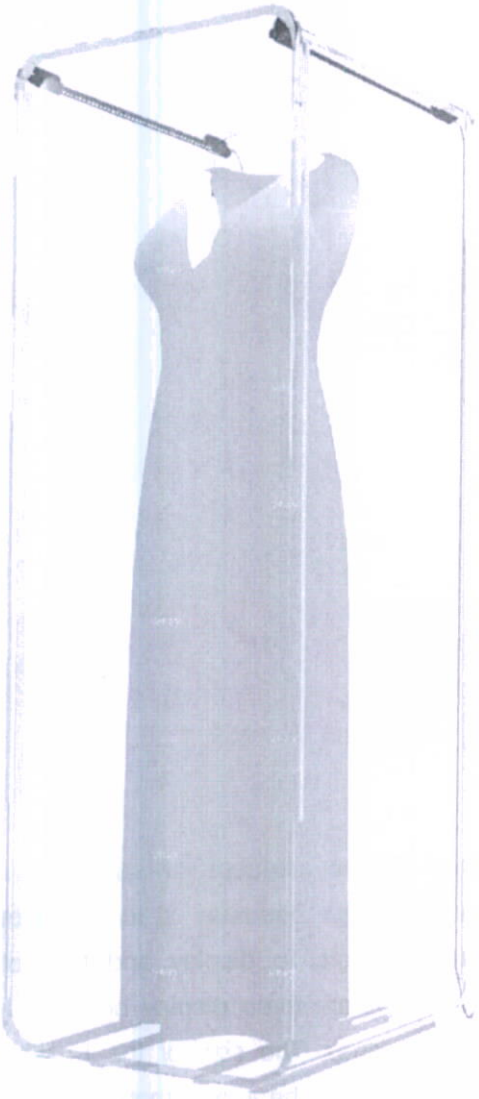


Figure 214.

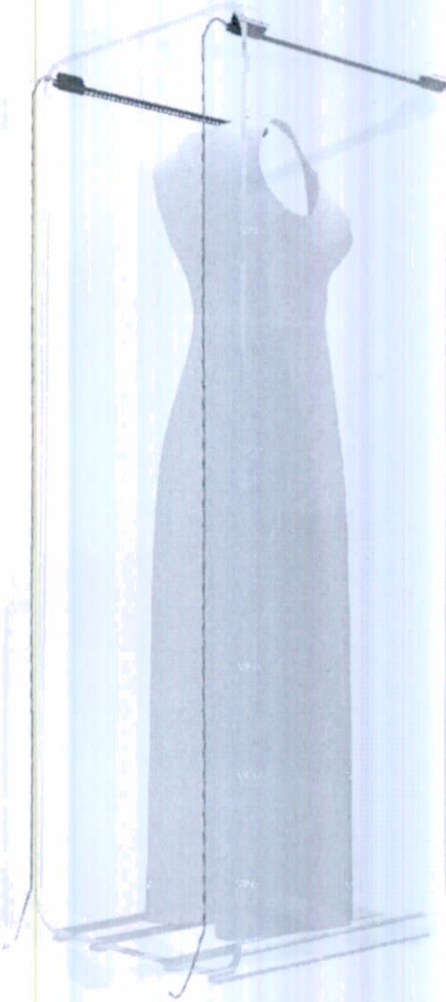


Figure 215.

A large unit can accommodate dresses, nightshirts, fur coats, and tuxedos. These boxes offer a neutral design line with an enclosed space that is half the weight of glass. Made from 12 millimeter thick acrylic with built in fiber optics lighting that does not generate harmfull excessive heat. Microclimatic monitoring devices which are digital thermometer, hydrometer and silica gel as microclimatic control material are sealed inside the box. A metal cylinder lock secures the precious artifacts. Therefore, these small boxes can accommodate artifacts without exposing them to various climatic environments. However, these boxes are not a display by themselves. They are attached to display systems which are designed to accommodate various boxes to create part of a narrative. Display boxes are slid to these systems by means of the plastic runners at the bottom of each box.

6.6.2 DISPLAY SYSTEMS

DISPLAY SYSTEM TYPE 1

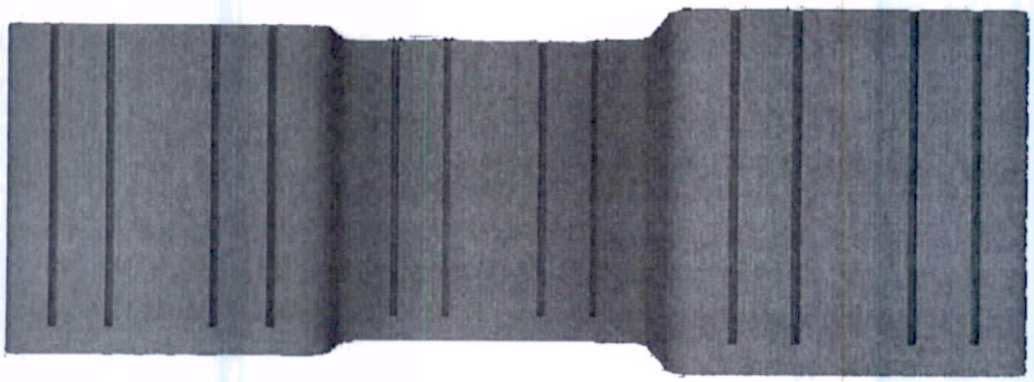


Figure 216.

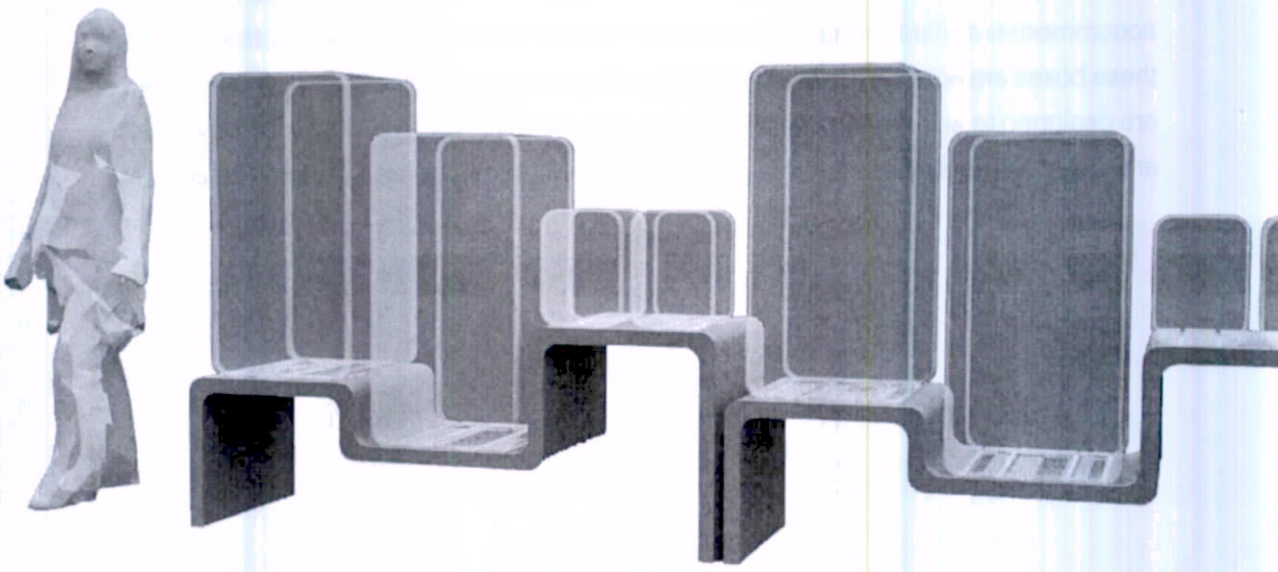


Figure 217.

DISPLAY SYSTEM TYPE 2

The Display System is an exhibition furniture system that can accommodate various boxes together. These systems are designed to create a stage for the artifacts, as well as securing them. There are two display systems designed for the Traveling Exhibition System. The first display system type has a linear form that allows the visitors to view the display on one side. This type is suitable to locate by the perimeters of the exhibition. The second type offers possibility of four sided display and is suitable for locating centerally in the exhibition. Besides providing visual access for the visitors and versatility of spatial arrangement, these systems create a method of security for the display boxes, the boxes are housed into the benches and locked onto them. Display systems are also designed to be lightweight and easy to move during transportation. These systems are made from pressure glued 50mm thick plywoods stained and sealed to protect from impact and stain during transportation. The ash finish gives the furniture a neutral look and is versatile.

Figure 218.

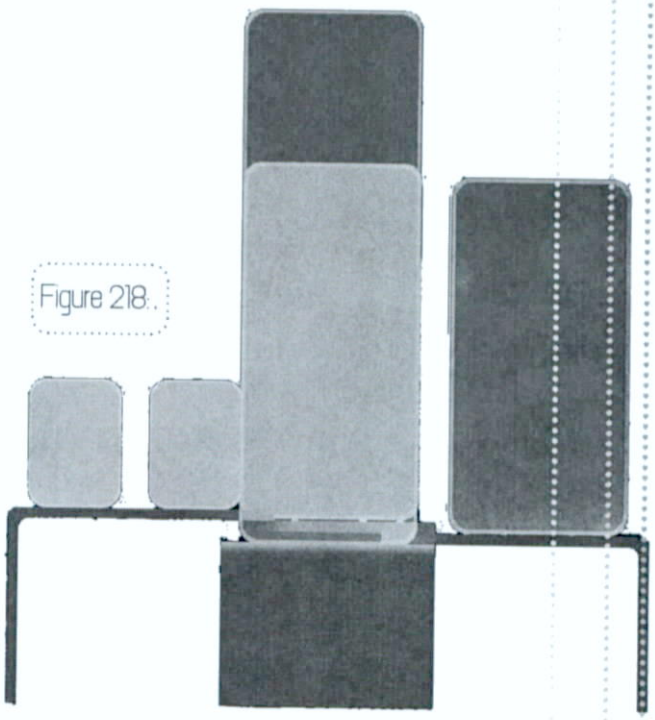


Figure 219.



6.6.3 HANDS-ON DESK AND NESTED STOOLS

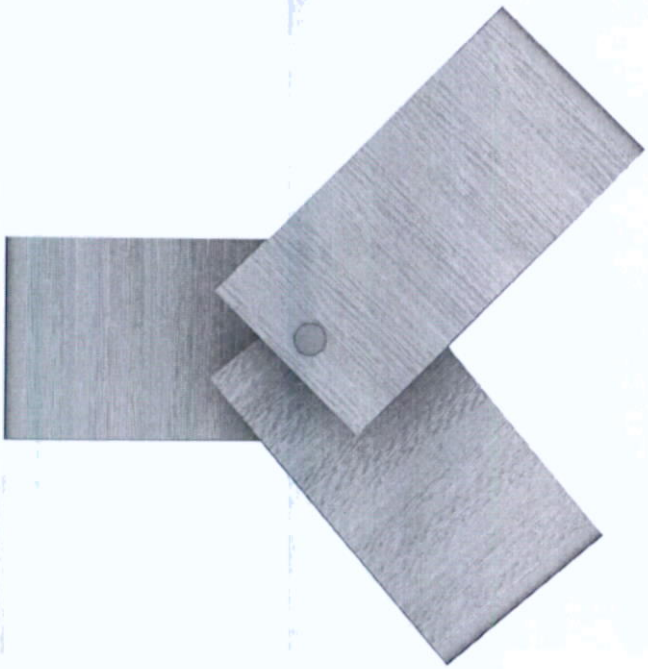


Figure 220: Hands-on Desk Plan - Open



Figure 221: Hands-on Desk Plan - Closed

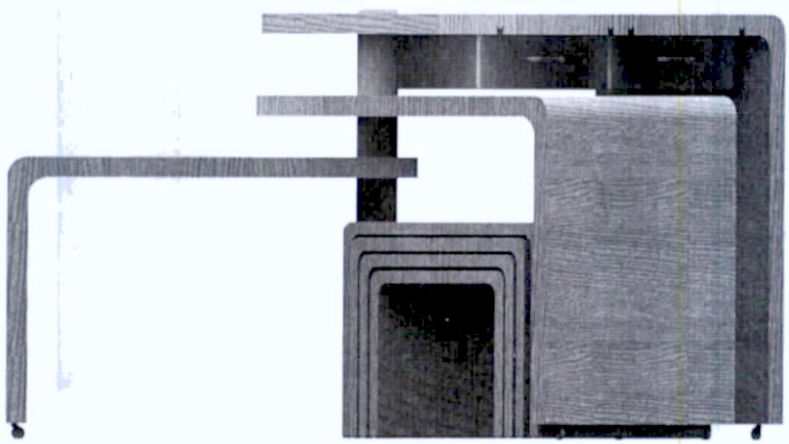
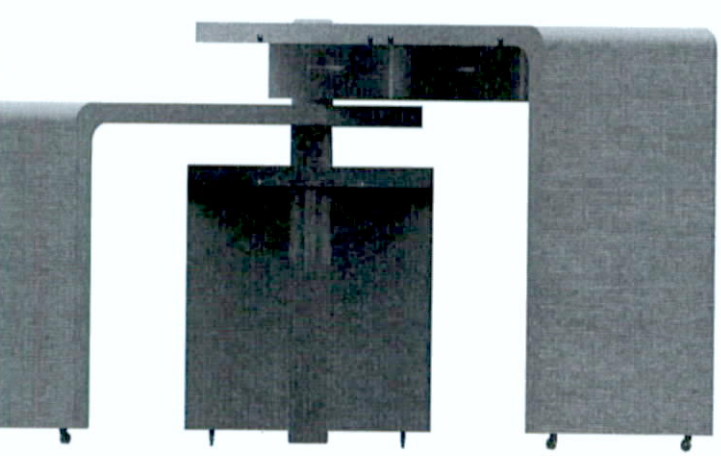


Figure 222: Hands-on Desk Elevation

The hands-on desk is a part of the hands-on installation where visitors are learning and making. The desk is constructed from plywood, laminated with natural ash veneer and finished with matte sealer to be stain and impact resistant. The design purpose was to be easily moved, lightweight and stain and impact resistant. The desk is mounted on casters to help the staff move it into the space. Visitor groups will use the table, so it has been designed to accommodate children, adults and for visitors with physical disabilities.



223: Hands-on Desk Elevation

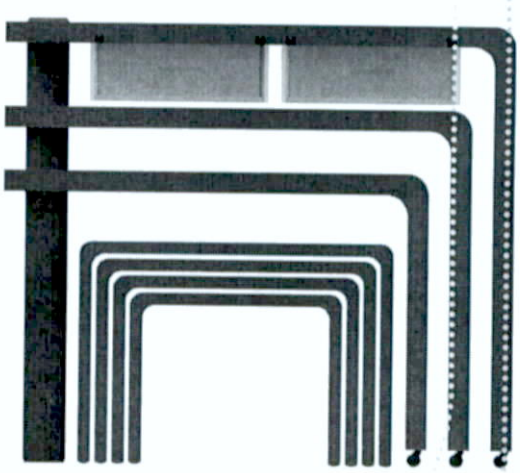


Figure 224: Hands-on Desk Elevation

6.6.4 INTERACTIVE INSTALLATION MIRROR



Figure 225:.

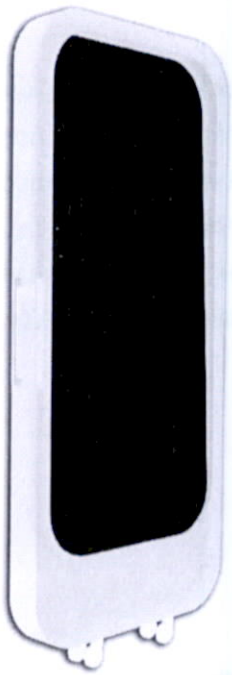


Figure 226:.

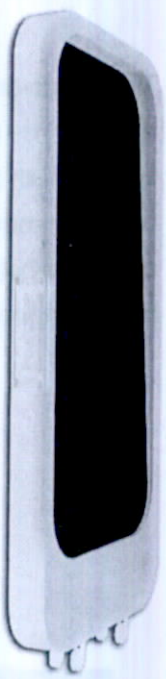


Figure 227:.

The interactive installation mirror is designed as lightweight and portable for the use of visitors who are interacting with the clothing items. Translucent white acrylic frame adds lightweight and strength to the mirror whereas four castors provide portability.

6.6.5 EXHIBITION BANNER



ure 228

The exhibition banner is installed at the entrance of the exhibition and gives a brief insight into the exhibition theme. For the Manitoban Weddings exhibition a 60cm by 180 cm exhibition banner is designed and installed on the TES structure frame.

6.6.6 TICKET AND INFORMATION DESK

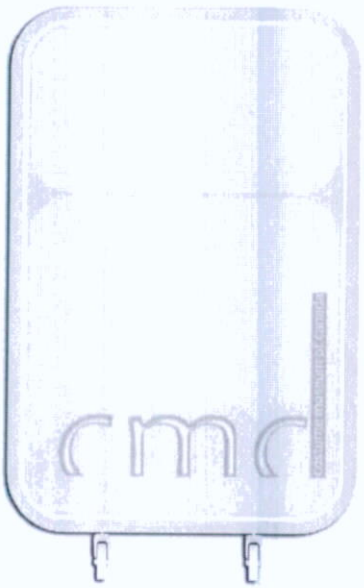


Figure 229 : Front Elevation

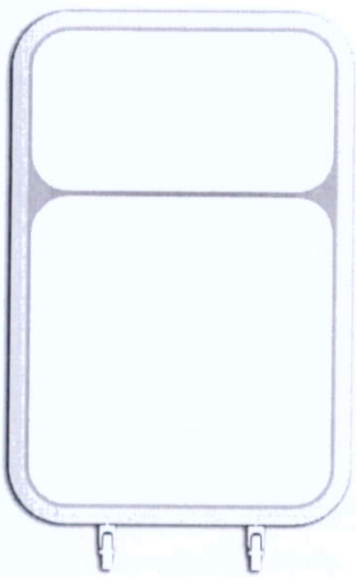


Figure 231 : Back Elevation



Figure 230 : .

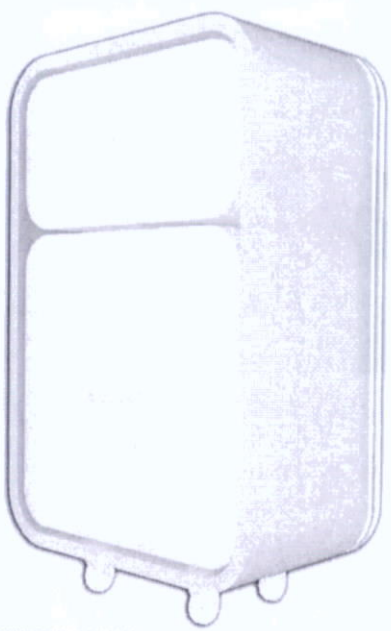


Figure 232 : .

The purpose of ticket desk is t
welcome visitors and to collect th
entrance fee that will be determine
by the museum. A white translucen
acrylite desk is located behind th
exhibition banner. with the logo o
CMC etched on the front face . Th
unit contains a lockable cash drawe
and compartment for persona
belongings.

6.6.7 CMC LOGO DESIGN



Figure 233

As Matthew Healey states that the idea of a brand is a promise of satisfaction. It is a metaphoric bond between a manufacturer and a consumer or an event and those who experience it.[1] Costume Museum's new logo will be a new bond between the public and the museum. The logo will be located on the curtains that face outside, on the ticket desk, as well as will be stamped on hands-on materials which visitors will take home.

115 Matthew *Healey, What is Branding?*, 2008, 20.

6.7 CONCLUSION

Cultural exhibitions offer an informal learning activity to visitors based on their own or other communities' culture by means of visual, audial, and text based tools to convey a narrative. Narratives are how humans understand and communicate to the world they live in. In terms of communicating, we use multitudes of mediums or communication channels that speak to our senses. Clothing is often staged in cultural exhibitions due to its close connection to life and the body.

There were two motivations to investigate traveling exhibitions and Costume Museum of Canada specifically: cultural and financial. Traveling exhibits are a way to reach out to communities and disseminate information making cultural information accessible. As for a cultural motivation, the CMC has the potential to revitalize the community's historical memories and provide information about fashion and social history and culture by traveling to places in Winnipeg and staging exhibitions. In terms of a financial motivation, the CMC doesn't have a permanent gallery currently and creates revenue by staging exhibitions around Winnipeg so that it can continue to stay actively in the community. Therefore, the intent of this project was to propose a traveling exhibition system that will be able to be built in public spaces -- existing buildings and interiors specifically -- as a consequence, it needs to be flexible and dynamic, cost effective, sustainable -- in other words can be maintained for a long term-- and able to assembled by volunteers.

Throughout this project, I questioned what kind of design elements and spatial qualities I need to employ to enhance visitors' experience in the exhibition space, fulfill their expectations of a cultural exhibition, and successfully convey a cultural message. In an ever changing exhibition practice based on visitor profiles, expectations and experiences. I found from the literature review that, current exhibition goers are more engaged with artifacts and value the learning and presentation process which gives the exhibition space a theatrical quality; where visitors are seen and see as both actors and audience. I was drawn to creating a theatrical quality without relying on the artifact displayed. I investigated mise-en-scene and how to imply its qualities into the exhibition space.

This project investigated and combined two main aspects into the proposed design: Feasibility and Exhibition. Feasibility is related to the flexibility and dynamics of the system; cost-effectiveness, sustainability, and requirement for volunteer assembly. Whereas, the exhibition aspects are related to focusing on display qualities of the artifacts and fulfilling visitors' expectations.

In order to set up traveling exhibitions in various public spaces the client needs a system that can be flexible and dynamic. There are three levels of flexibility that have been proposed in this project which respond to spatial configuration, structural assembly and the display system design.

Conceptual work in chapter 4 reveals various qualities of cloth, clothing and its practices which are employed in multiple levels in the proposed design. Traveling as a concept has inspired the form of the display boxes and systems.

It has been a challenge to create a system that is structurally sound, flexible, and that can be assembled by volunteers. However, the proposed design achieves a great deal of flexibility with in the limitations of the structural system developed.

PRINT WORKS

Abbott, H. Porter. The Cambridge Introduction to Narrative. Cambridge Introductions to Literature. 2nd ed. Cambridge ; New York: Cambridge University Press, 2008.

Bal, Mieke and Christine van Boheemen. Narratology. 3rd ed. Toronto: University of Toronto Press, 2009, http://site.ebrary.com/lib/umanitoba/Top?id=10382167.

Breward, Christopher. Fashion. Oxford History of Art. Oxford ; New York: Oxford University Press, 2003.

Burian, Jarka. The Scenography of Josef Svoboda. -- ed. Middletown, Conn.: Wesleyan University Press, 1971.

Burian, Jarka, and Dieter W. Kaisenberg. The Designs of Josef Svoboda. Glendale: KaiDib Films International, 1973.

Butlin, Susan and Florence Carlyle. The Practice of Her Profession: Florence Carlyle, Canadian Painter in the Age of Impressionism. McGill-Queen's/Beaverbrook Canadian Foundation Studies in Art History. Kingston Ontario;Ithaca N.Y.: McGill-Queen's University Press, 2009.

Csikszentmihalyi, Mihaly and Eugene Rochberg-Halton. The Meaning of Things: Domestic Symbols and the Self. Cambridge Eng. ; New York: Cambridge University Press, 1981.

Cumming, Valerie. Understanding Fashion History. New York : Costume and Fashion Press, 2004.

Dernie, David. Exhibition Design. 1 American ed. New York: W.W. Norton, 2006.

Eicher, Joanne Bubolz, Sandra Lee Evenson, and Hazel A. Lutz. The Visible Self: Global Perspectives on Dress, Culture, and Society. 3rd ed. New York: Fairchild Publications, 2008.

Entwistle, Joanne, and Elizabeth B. Wilson, eds. Body Dressing. Oxford : Berg, 2001.

Finnegan, Ruth H. Communicating: The Multiple Modes of Human Interconnection. London: Routledge, 2002.

Fludernik, Monika. An Introduction to Narratology [Einführung in die Erzähltheorie.]. London ; New York: Routledge, 2009.

Garner, Stanton B. Bodied Spaces: Phenomenology and Performance in Contemporary Drama. Ithaca, N.Y.: Cornell University Press, 1994.

Houston Alfred Baker Jr., "Beyond Artifacts: Cultural Studies and the New Hybridity of Rap," in Cultural Artifacts and the Production of Meaning: The Page, the Image, and the Body, eds. Margaret J. M. Ezell and Katherine O'Brien O'Keeffe. Ann Arbor: University of Michigan Press. 1994

Howe, Alan S., Isamu Ishii, and Tomohiro Yoshida. "Kit-of-Parts: A Review of Object-Oriented Construction Techniques."1999.

Kaisenberg, Dieter W., Jarka Burian, Josef Svoboda, and KaiDib Films International. The Designs of Josef Svoboda. Glendale, Calif.: KaiDib Films International, 1973.

REFERENCES

Kennedy, Dennis. The Oxford Encyclopedia of Theatre & Performance. Oxford ; New York: Oxford University Press, 2003.

Klanten, Robert and Lukas Feireiss. Staging Space: Scenic Interiors and Spatial Experiences. Berlin: Gestalten, 2010.

Kossmann, Herman, Mark W. de Jong, and Kossmann.dejong. Engaging Spaces: Exhibition Design Explored. Amsterdam: Frame, 2010.

Locker, Pam. Basics Interior Design 02: Exhibition Design. Basics Interior Design. Vol. 2. Lausanne: AVA Academia, 2011.

Lord, Barry and Gail Dexter Lord. The Manual of Museum Exhibitions. Walnut Creek, CA: AltaMira Press, 2001.
Malaher, Rosemary. "My Basement is Full: The Building of the Dugald Costume Museum."1990.

Onega Jaén, Susana and José Angel García Landa. Narratology: An Introduction. Longman Critical Readers. London ; New York: Longman, 1996.

Pavis, Patrice, Marvin A. Carlson, and Christine Shantz. Dictionary of the Theatre [Dictionnaire du théâtre.]. Toronto, Ont.: University of Toronto Press, 1998.

Ramljak, Suzanne. "Intimate Matters: Objects and Subjectivity." In Objects and Meaning: New Perspectives on Art and Craft, edited by M. Anna Fariello and Paula Owen, 186-97. Lanham, Md.: Scarecrow Press, 2004.

Rathje, William L., and Michael B. Schiffer. Archaeology. New York: Harcourt Brace Jovanovich, 1982.

Ribeiro, Aileen. The Art of Dress: Fashion in England and France, 1750 to 1820. New Haven, CT: Yale University Press, 1995.

Schiffer, Michael B. and Andrea R. Miller. The Material Life of Human Beings: Artifacts, Behavior, and Communication. London ; New York: Routledge, 1999.

Skibo, James M. and Michael B. Schiffer. People and Things: A Behavioral Approach to Material Culture. New York: Springer, 2008.

Stanton B. Garner, Bodied Spaces: Phenomenology and Performance in Contemporary Drama (Ithaca: Cornell University Press, 1994.

Weinthal, Lois. Toward a New Interior: An Anthology of Interior Design Theory. 1st ed. New York: Princeton Architectural Press, 2011.

ONLINE RESOURCES

Barthes, Roland and Lionel Duisit. "An Introduction to the Structural Analysis of Narrative." New Literary History 6 no. 2 (1975): 237-72.

Deetz, James. In Historical Archaeology and the Importance of Material Things: Papers of the Thematic Symposium, Eighth Annual Meeting of the Society for Historical Archaeology, Charleston, South Carolina January 7-11, 1975, edited by Leland Greer Ferguson, 10. S.L.: The Society for Historical Archaeology, 1977.

Great Britain Department of Science and Art. Report of the Department of Science and Art. London: George E. Eyre and William Spottiswoode, 1856.

Prince, G. "Classical and/or Postclassical Narratology." L'Esprit Cré Ateur 48, no. 2 (2008): 115-23.

Prown David, Jules. "Mind in Matter: An Introduction to Material Culture Theory and Method" Winterthur Portfolio 17, no. 1 (1982): 1-19, http://www.jstor.org/stable/1180761 (accessed May 20, 2013).

Prown David, Jules. "Style as Evidence." Winterthur Portfolio 15, no. 3 (1980): 197-210, http://www.jstor.org/stable/1180742 (accessed May 20, 2013).

Todorov, Tzvetan and Arnold Weinstein. "Structural Analysis of Narrative." Novel: A Forum on Fiction 3, no. 1 (1969): 70-6, http://www.jstor.org/stable/1345003 (accessed November 6, 2012).

Unesco. Temporary and Travelling Exhibitions. Paris: 1963.

"Narratology and Structuralism." In The Encyclopedia of Literary and Cultural Theory. Hoboken, NJ, USA: Wiley, 2011.

Pattern in Islamic Art. "Background Note Number 5 : Materials and Mediums." http://www.patterninislamicart.com/background-notes/materials-and-mediums/ (accessed 10 6, 2012).

The National Gallery of Canada. "Our History: 1919 Exhibits." The National Gallery of Canada. http://www.gallery.ca/en/about/1910s.php#year_1919 (accessed 10 6, 2012).

Ashmolean Museum of Art and Archaeology, "History of the Ashmolean," Ashmolean Museum of Art and Archaeology, http://www.ashmolean.org/about/historyandfuture/ (accessed May 20, 2013).

The British Museum, "History of the British Museum," The British Museum, http://www.britishmuseum.org/about_us/the_museums_story/general_history.aspx (accessed November 6, 2012).

Association of Manitoba Museums, "Costume Museum of Canada," Association of Manitoba Museums, http://museumsmanitoba.com/dir/winnipeg/1.html (accessed January 20, 2012).

"Minister Welcomes Costume Museum to New Home," Province of Manitoba News Releases, http://news.gov.mb.ca/news/index.html?archive=&item=1954 (accessed November 2, 2012).

"The Costume Museum of Canada," Things To Do, http://www.tourismwinnipeg.com/things-to-do/historical/display,profile/01283/the-costume-museum-of-canada-closed-until-a-new-location-is-found (accessed November 2, 2012)

Steve Kleinedler, ed., The American Heritage® Dictionary of the English Language (Boston: Houghton Mifflin Harcourt, 2007), s.v. "Culture," http://www.credoreference.com.proxy1.lib.umanitoba.ca/entry/hmdictenglang/culture (accessed May 20, 2013).

The Sage Dictionary of Cultural Studies, Culture, in the Credo Reference, http://www.credoreference.com.proxy1.lib.umanitoba.ca/entry/sageukcult/culture (accessed May 20, 2013)

Alexandra Palmer "Reviewing Fashion Exhibitions," Fashion Theory 12, no. 1 (2008): 121-26, doi: 10,2752/175174108X269595 (accessed May 20, 2013), 32.

Suzanne Ramljak, "Intimate Matters: Objects and Subjectivity," in Objects and Meaning: New Perspectives on Art and Craft, ed. M. Anna Fariello and Paula Owen (Lanham, Md.: Scarecrow Press, 2004), 86.

Valerie Steele, "A Museum of Fashion Is More Than a Clothes-Bag," Fashion Theory 2, no. 4 (1998): 328.

Jules Prown David, "Style as Evidence," Winterthur Portfolio 15, no. 3 (1980), 197, http://www.jstor.org/stable/1180742 (accessed May 20, 2013).

Jules Prown David, "Mind in Matter: An Introduction to Material Culture Theory and Method" Winterthur Portfolio 17, no. 1 (1982), 1, http://www.jstor.org/stable/1180761 (accessed May 20, 2013).

E. McClung Fleming, Artifact Study: A Proposed Model, in the JSTOR, http://firstsearch.oclc.org.proxy1.lib.umanitoba.ca/WebZ/FSPage?pagetype=return_frameset:sessionid=fsapp7-55326-hjv0nogv-6fml0k:entitypagenum=4:0:entityframedurl=http%3A%2F%2Fwww.jstor.org%2Fjournals%2F00840416.html:entityframedtitle=WorldCat:entityframed (accessed May 20, 2013), 156-158.

Julia Petrov, "Cross-purposes: Museum Display and Material Culture," Cross Currents 62, no. 2 (14 June 2012): 219-34, doi: 10.1111/j.1939-3881.2012.00231.x (accessed May 20, 2013), 223.

Aileen Ribeiro, The Art of Dress: Fashion in England and France, 1750 to 1820 (New Haven, CT: Yale University Press, 1995), 5.

Mieke Bal and Christine van Boheemen, Narratology, 3rd ed. (Toronto: University of Toronto Press, 2009), http://site.ebrary.com/lib/umanitoba/Top?id=10382167, 3.

Know MODA. "About MODA Mall." MODA Mall. Accessed on April 11, 2014, from http://www.modabwtc.com/

Marcel Wanders Studio. "Villa Moda," Interiors. Accessed April on 11, 2014, from http://www.marcelwanders.com/interiors/villa-moda/

1.1.1 General Space and Reach Requirements

Design Requirements

The clear space required for a wheelchair to make a 360-degree turn is 1830 mm (72 in.) in diameter. Fo a scooter to make a 360 degree turn a clear space of 2440 mm (96 in.) diameter is required. The minimum clea floor or ground space required to accommodate a single, stationary wheelchair or scooter and occupant shall be 760 mm (30 in.) x 1370 mm (54 in.).

The minimum clear floor or ground space for wheelchairs or scooters may be positioned for forward o parallel approach to an object. Clear space for wheelchairs may be part of the knee space required under some objects.

The surface of clear floor or ground spaces for wheelchairs and scooters shall comply with Sections 2.1.1 Exterior Ground Surfaces and 3.1.1 Interior Floor Surfaces.

If the clear space only allows forward approach to an object, the maximum high forward reach allowed shall be 1200 mm (47 in.). The minimum low forward reach is 400 mm (15-3/4 in.).

If the clear space allows parallel approach to an object, the maximum high side reach allowed shall be 1370 mm (54 in.) and the low side reach no less than 230 mm (9 in.) above the floor. If the side reach is over an obstruction, the reach and clearances shall be as shown in. Notwithstanding these requirements, all controls for the operation of facility services or safety devices, including electrical switches, thermostats and intercom switches, shall be mounted 850 mm (33-1/2 in.) to 1200 mm (47 in.) above the floor as per Section 3.5.1 Control and Operating Mechanisms.

1.1.3 Accessible Routes, Paths and Corridors

Design Requirements

The minimum clear width of accessible routes shall be 1100 mm (43-1/4 in.). where space is required for two wheelchairs to pass, it shall be 1830 mm (72 in.).

1.1.4 Gates, Turnstiles and Openings

Design Requirements

Where gates or openings are provided through fences or screens to public use areas, such openings shall be accessible (i.e., a minimum of 915 mm (36 in.) wide, to allow free passage of a person in a wheelchair. Hardware

APPENDIX A

UNIVERSAL DESIGN AND BUILDING CODE COMPLIANCE

should be suitable for autonomous use, and any closing device should not be spring loaded).

Where turnstiles or other ticketing control devices which are not wheelchair accessible are utilized, then a gate or opening which is accessible shall also be provided in the same location.

Turnstiles shall incorporate a pronounced colour contrast, to differentiate them from the surrounding environment.

Where gates are incorporated into a chain-link fencing system, the poles at either side of the gate shall incorporate a pronounced colour contrast from the fence and the surrounding environment.

1.2.5 Information Systems

Design Requirements

Where information is provided by video display terminals the same information shall be provided in an alternative format, such as audio, Braille and large-text print. Refer to the Canadian National Institute of the Blind "Clear Print Guidelines" for further detail.

Exhibits that include important artefacts, labels and graphics, shall be placed 1000 - 1200 mm (39-3/8 - 47 in.) from the floor. A minimum 1500 mm x 1500 mm (54 in. x 54 in.) clear space directly in front of the sign is required for its approach and use.

3.1.1 Interior Floor Surfaces

Design Requirements

Floor surfaces shall be stable, firm, slip resistant and glare-free. Floor surfaces shall not be heavily patterned. Carpet shall be low profile or low loop construction, directly glued to the subfloor. Where hard, monolithic materials are selected, they shall be nonslip and non-glare, complying with Section 1.2.1 Textures, Finishes and Colour. Where floor tiles are used, joints should be no wider than 6 mm (1/4 in.) and should be flush. Carpets or carpet tile shall be securely fixed; have a firm cushion, pad or backing, where used; have a level loop, textured loop, level cut pile, or level cut/uncut pile texture with a maximum pad and pile height of 13 mm (1/2 in.); and have exposed edges fastened to floor surfaces with trim.

3.2.1 Information, Reception and Service Counters

Design Requirements

Counters for information or service shall incorporate at least one accessible section that is located between 710 mm (28 in.) and 865 mm (34 in.) above the finished floor or ground. This section shall be at least 920 mm (36 in.) wide.

Accessible sections of information, reception and service counters shall have, on both sides of the counter, knee space below of at least 700 mm (27-1/2 in.) high by 500 mm (19-5/8 in.) deep.

Wheelchair seating spaces at accessible sections of information, reception and service counters shall incorporate a clear space not less than 760 mm (30 in.) by 1370 mm (54 in.). Where a forward approach is used to access a wheelchair seating space, a clear knee space of at least 760 mm (30 in.) wide, 500 mm (19 5/8 in.) deep and 700 mm (27 1/2 in.) high shall be provided.

Where speaking ports are provided at information, reception or service counters, at least one such position should have a speaking port no higher than 1060 mm (42 in.) above the finished floor or ground. If counter extension is used to accomplish adequate knee clearance, ensure it meets the requirements of Section 1.1.3 Accessible Routes, Paths and Corridors. Point of sale mechanisms must be accessible (portable or reachable) to all users.

3.4.2 Assistive Listening Systems

Design Requirements

Signage complying with applicable provisions of Section 1.2.4 Signage and shall be installed to notify patrons of the availability of a listening system. Induction loops, infrared systems and FM radio frequency systems shall be considered acceptable types of assistive listening systems for persons who are hard of hearing. Where an induction loop system is installed, dimmer switches and other controls that incorporate transformer coils shall be located so as not to interfere with the audio induction loop. Where infrared assistive listening devices are used, overhead lights shall be located so as not to cancel out the infrared signal at the receiver.

Where an FM loop system or other assistive listening devices are available in public facilities or meeting areas, portable headsets that are compatible with personal hearing aids shall be made available. Where an

induction loop system is utilized, at least half the seating area shall be encompassed. Where the listening system provided serves individual fixed seats, such seats shall be located within a 15-meter (50-ft.) viewing distance of the stage or playing area and shall have a complete view of the stage or playing area.

Background noise from mechanical systems shall be minimized. Areas used for presentations and other public events, where listening to verbal communication is integral to the function of the space, shall incorporate one well illuminated area for sign-language interpreting. Lighting control systems must allow the area to be independently controlled.

NATIONAL BUILDING CODE OF CANADA

Major Occupancy Type: Group A, Division 2, Art Galleries, Museums, Exhibition halls

3.1.6. TENTS AND AIR-SUPPORTED STRUCTURES

3.1.6..1 MEANS OF EGRESS

Tents and air-supported structures shall conform to Sections 3.3 and 3.4

3.1.6.5. FLAME RESISTANCE

Every tent and air-supported structure and all tarpaulins and decorative materials used in connection with these structures shall conform to CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films."

3.1.6.7. ELECTRICAL SYSTEMS

The electrical system and equipment in a tent or air-supported structure, including electrical fuses and switches shall be inaccessible to the public. Cables on the ground in areas used by the public in a tent or air-supported structure shall be placed in trenches or protected by covers to prevent damage from traffic.

A-3.1.6 TENTS AND AIR SUPPORTED STRUCTURES

The requirements in this subsection are intended to be limited to certain types of structure. For instance, the word "tent" as used in the Code is intended to refer to a temporary shelter which is used at an open air event such as fair or an exhibition. A tent will normally be are not intended to be applied to fabric structures located on buildings.

3.3.1.5. EGRESS DOORWAYS

3.3.1.5. A. EGRESS IN FLOOR AREA NOT SPRINKLED THROUGHOUT

Group A maximum area of room or suite 150 m2, maximum distance to egress doorway 15m.

3.3.1.8. HEADROOM CLEARANCE

Except within the floor area of a storage garage, the minimum headroom clearance in every access to exit shall conform to the requirements of Article 3.4.3.4. for exits.

3.3.1.17. CAPACITY OF ACCESS TO EXITS

The capacity of an access to exit shall be based on the occupant load of the portion of the floor area served.

3.3.2.3. NON-FIXED SEATING

Non-fixed seating shall conform to the NFC.

3.4.2.1. MINIMUM NUMBER OF EXITS

Except as permitted by Sentences (2) to (4), every floor area intended for occupancy shall be served by at least 2 exits.

3.4.2.3. DISTANCE BETWEEN EXITS

Except as provided in Sentence (2), the least distance between 2 exits from a floor area shall be one half the maximum diagonal dimension of the floor area, but need not to be more than 9m for a floor area having a public corridor.

3.4.2.5. LOCATION OF EXITS

Except as permitted by Sentences (2) and 3.3.2.5.(6), if more than one exit is required from a floor area, the exits shall be located so that the travel distance to at least one exit shall be not more than 30m in any floor area other than those referred to in Clauses (a) to (e). Exits shall be located and arranged so that they are clearly visible or their locations are clearly indicated and they are accessible at all times.

3.4.3.2. EXIT WIDTH

The minimum width of exits shall conform to Tables 3.4.3.2.A. and 3.4.3.2.B.

Occupancy Classification	Doorways (mm)
Group A	800

3.4.3.4. HEADROOM CLEARANCE

No door closer or other device shall be installed so as to reduce the headroom clearance of a doorway to less than 1 980mm.

3.4.4.4. INTEGRITY OF EXITS

An exit shall be designed for no purpose other than for exiting, except that an exit is permitted also to be designed to serve as an access to a floor area.

3.4.5.1. EXIT SIGNS

Every exit door shall have an exit sign placed over or adjacent to it if the exit serves, a room or a floor area that has a fire escape as part of a required means of egress.

Every exit sign shall be visible on approach to the exit. Every exit sign shall conform to the dimensions indicated in ISO 7010, "Graphical symbols – safety colors and safety signs – Safety signs used in workplaces and public areas," for the following symbols (see Appendix A): i) E001 emergency exit left.

Internally illuminated exit signs shall be continuously illuminated and where illumination of the sign is not powered by an electrical circuit, be constructed in accordance with CAN/ULC-S572, "Photoluminescent and Self-Luminous Signs and Path Marking Systems." (See Appendix)

The circuitry serving lighting for externally and internally illuminated exit signs shall serve no equipment other than emergency equipment, and be connected to an emergency power supply as described in Article 3.2.7.4.

2.1.5. PORTABLE EXTINGUISHERS

2.1.5.1. SELECTION AND INSTALLATION

Portable extinguishers shall be installed in all buildings except dwelling units.

Except otherwise required by this Code, portable extinguishers shall be selected and installed in accordance with NFPA 10, "Portable Fire Extinguishers."

Notwithstanding the requirements of Sentence (2), portable extinguishers used to comply with this Code shall conform to the following performance standards as applicable:

CAN/ULC-S503, "Carbon-Dioxide Fire Extinguishers"

CAN/ULC-S504, "Dry chemical Fire Extinguishers"

CAN/ULC-S507, "Water Fire Extinguishers,"

CAN/ULC-S512, "Halogenated Agent Hand and Wheeled Fire Extinguishers,"

CAN/ULC-S554, "Water Based Agent Fire Extinguishers," and

CAN/ULC-S566, "Halocarbon Clean Agent Fire Extinguishers."

Notwithstanding the requirements of Sentence (2), portable extinguishers shall be rated and identified in conformance with CAN/ULC-S508, "Rating and Fire Testing of Fire Extinguishers."

Portable extinguishers in proximity to a fire hazard shall be located so as to be accessible without exposing the operator to undue risk.

A-2.1.5.1.(5) Following are examples of measures deemed

to minimize the risk of injury for portable extinguisher operators: affixing prominent cautionary labels on portable extinguishers and warning signs at entry points to confined spaces, enabling remote applications such as by providing special nozzles, installing special ventilation systems, providing breathing apparatus and other personal protective equipment, and adequately training personnel.

Portable extinguishers that are subject to corrosion shall not be installed in a corrosive environment unless they are provided with appropriate corrosion protection.

2.3.1.2. MOVABLE PARTITIONS AND SCREENS

Movable partitions or screens, including acoustical screens, shall have a flame-spread rating not greater than that required for the interior finish of the area in which they are located.

2.3.1.3. DECORATIVE MATERIALS

Decorative materials on the walls or ceilings shall have a flame-spread rating not greater than that required for the interior finish of the space in which they are located.

2.3.2.1. DRAPES, CURTAINS AND DECORATIVE MATERIALS

Drapes, curtains and other decorative materials including textiles and films used in buildings shall conform to CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films," when such drapes, curtains and other decorative materials are used in any assembly occupancy or Group B, Division 1 detention occupancy.

2.3.2.2. FLAME RETARDANT TREATMENTS

Flame retardant treatments shall be renewed as often as is required to ensure that the material will pass the match flame test in NFPA 705, "Field Flame Test for Textiles and Films."

2.4.7. ELECTRICAL INSTALLATIONS

2.4.7.1. USE AND MAINTENANCE

Electrical installations shall be used and maintained so as not to constitute an undue hazard.

2.7.1.3. OCCUPANT LOAD

The maximum permissible occupant load for any room shall be calculated on the basis of the lesser of 0.4 m2 of net floor space per occupant. The number of occupants permitted to enter a room shall not exceed the maximum occupant load calculated in conformance.

2.7.1.4. SIGNS

Signs required by the NBC to indicate the occupant load for a floor area shall be posted in conspicuous locations near the principal entrances to the floor area. Signs required shall have lettering not less than 50 mm high with a 12 mm stroke.

NATIONAL FIRE CODE OF CANADA (CONTINUED)

2.7.3. EXIT LIGHTING, EXIT SIGNS AND EMERGENCY LIGHTING

2.7.3.1. Installation and Maintenance

Exit lighting and exit signs shall be illuminated during times when the building is occupied. Emergency lighting shall be maintained in operating condition, in conformance with Section 6.5.

2.8. EMERGENCY PLANNING

2.8.1.2. TRAINING OF SUPERVISORY STAFF

Supervisory staff shall be trained in the fire of emergency procedures described in the fire safety plan before they are given any responsibility for fire safety.

2.8.1.3. KEYS AND SPECIAL DEVICES

Any keys or special devices needed to operate the fire alarm system or provide access to any fire protection systems or equipment shall be readily available to on-duty supervisory staff.

2.8.2.1. MEASURES IN A FIRE SAFETY PLAN

In buildings or areas described in Article 2.8.1.1., a fire safety plan conforming to this Section shall be prepared in cooperation with the fire department and other applicable regulatory authorities and shall include:

- The emergency procedures to be used in case of fire, including sounding the fire alarm, notifying the fire department, instructing occupants on procedures to be followed when the fire alarm sounds, evacuating occupants, including special provisions for persons requiring assistance, and confining, controlling and extinguishing the fire,
- The appointment and organization of designated supervisory staff to carry out fire safety duties,
- The training of supervisory staff and other occupants in their responsibilities for fire safety,
- Documents, including diagrams, showing the type, location and operation of the building fire emergency systems,
- The holding of fire drills,
- The control of fire hazards in the building, and
- The inspections and maintenance of building facilities provided for the safety of occupants.

2.8.2.3. ASSEMBLY OCCUPANCIES

In Group A, Division 1 assembly occupancies containing more than 60 occupants, there shall be at least one supervisory staff member on duty in the building to perform the tasks outlined in the fire safety plan in Clause 2.8.2.1.(1)(a) whenever the building is open to the public.

2.8.2.5. RETENTION OF FIRE SAFETY PLANS

The fire safety plan shall be kept in the building for reference by the fire department, supervisory staff and other personnel.

2.9. TENTS AND AIR-SUPPORTED STRUCTURES

2.9.2.1. FLAME RETARDANT TREATMENTS

Flame retardant treatments shall be renewed as often as is required to ensure that the material will pass the match flame test in NFPA 705, "Field Flame Test for Textiles and Films."

2.9.3.1. ELECTRICAL SYSTEMS

The electrical system in a tent or air-supported structure shall be maintained and operated in a safe manner. Portable electrical systems shall be inspected for fire hazards and defects shall be corrected before the tent or air-supported structure is occupied by the public. The electrical system and equipment in a tent or air-supported structure, including electrical fuses and switches, shall be inaccessible to the public. Cables on the ground in areas used by the public in a tent or air-supported structure shall be placed in trenches or protected by covers to prevent damage from traffic.

NATIONAL FIRE CODE OF CANADA (CONTINUED)

6.1. FIRE PROTECTION EQUIPMENT

6.1.1.2. MAINTENANCE

Fire protection installations shall be maintained in operating condition.

6.2. PORTABLE EXTINGUISHERS

6.2.1.1. INSPECTION, TESTING AND MAINTENANCE

Portable extinguishers shall be inspected, tested and maintained in conformance with NFPA 10, "Portable Fire Extinguishers."

6.4. WATER-BASED FIRE PROTECTION SYSTEMS

6.4.1.1. INSPECTION, TESTING AND MAINTENANCE

Water-based fire protection systems shall be inspected, tested and maintained in conformance with NFPA 25, "Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems."

6.5. EMERGENCY POWER SYSTEMS AND UNIT EQUIPMENT FOR EMERGENCY LIGHTING

6.5.1.1. INSPECTION, TESTING AND MAINTENANCE

Emergency power systems shall be inspected, tested and maintained in conformance with CAN/CSA-C282, "Emergency Electrical Power Supply for Buildings."

APPENDIX A

CITY OF WINNIPEG SPECIAL EVENTS PERMIT

DEFINITION

The word "tent" as used here to refers to a temporary shelter which is used at open air events such as fairs festivals, exhibitions, etc. A tent will normally be constructed of fabric held up by poles and attached by ties and pegs.

CONDITIONS

In general, a special events permit will be required for tents, large concert stages, large bleachers, etc. used in conjunction with an event open to the public, whether on private or public property.

APPROVAL PROCESS

The approval process for special events permits begins at the Zoning and Permits Branch after which the plans will be forwarded internally to other City offices involved in the process.

1. The Zoning and Permits Branch will require that you present the following information:
    a) Three sets of plans (see code requirements below) which include a site location plan;
    b) Certificate of title (if the site is vacant); and
    c) Surveyor's certificate (if there are existing buildings on site).
2. Fire Prevention - Manitoba Fire Code
3. Health will be forwarded the plans in those cases where food-handling is undertaken

MANITOBA BUILDING CODE REQUIREMENTS

A) FIRE PROTECTION INFORMATION

1. Interior layout plan which shows:
    - the tent dimensions;
    - the location and width of exits;
    - the number of occupants; and,
    - a seating plan showing the location of aisles and aisle dimensions.
2. Fabric approval.

Every tent and all tarpaulins and decorative materials used in connection with such structures shall conform to ULC - S109, "Standard for Flame Tests of Flame-Resistant Fabrics and Films."

The applicant will be required to submit proof that this requirement is achieved. Normally the tent supplier will have a Certification from an independent testing laboratory that the Fabric meets ULC - S109 or the equivalent NFPA Standard 701.

3. Emergency lighting and exit signs.

a) Emergency lighting

If the occupant load of the tent exceeds 60 persons and illumination of the tent is provided from an electrical circuit, the tent layout must indicate provision for emergency lighting.

b) Exit signs

Where the number of occupants exceeds 60 persons or where lighting levels are below that which would provide easy identification of the exits, exit signs must be provided and this must be indicated on the plan.

B) STRUCTURAL DESIGN INFORMATION

1. Tent supplier's structural drawings of the tent and the specifications.

The application for a permit must include a structural drawing from the tent supplier indicating pole sizes, tie down locations, etc. If the area of the tent exceeds 83.6 square metres (900 square feet), the drawings and specifications must be under the seal of a Professional Engineer registered in the Province of Manitoba. Tent suppliers may file a plan and specification with the Plan Examination Branch and refer to the drawing and specification rather than supplying this drawing with each new permit application.

2. Structural drawings for large stages, bleachers, etc. (for major events such as rock concerts)

The application for a permit must include all structural drawings for the erection of stages and bleachers and shall be submitted under seal and signature of a Professional Engineer registered in the Province of Manitoba.

3. Required inspection and certifications

a) Letter of Intent — Where a Professional Engineer is required, the engineer must submit a letter of intent with the permit application. The letter of intent shall state that he/she will inspect the tent, stage, bleachers, etc. prior to occupancy and certify in writing to the building inspector that the tent is safe to be occupied.

b) Certification Letter — The certification letter referred to in (a) shall state:

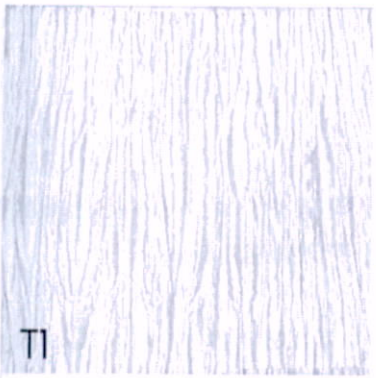
This letter certifies that I have inspected the tent, stage, bleachers, etc. for the purposes of confirming Part 4 conformance with plans, specifications, and installation instructions. To the best of my knowledge the tent, stage, bleachers, etc. has been installed in accordance with all applicable Codes and Standards and is safe to be occupied. I will carry out periodic inspections that I judge reasonable to ensure that the tent, stage, bleachers, etc. is maintained in conformance with applicable Codes and Standards until it is dismantled.

FLOORING

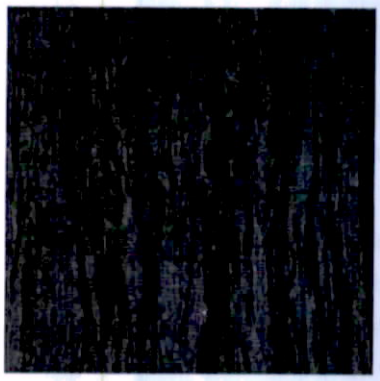


CT

TEXTILES



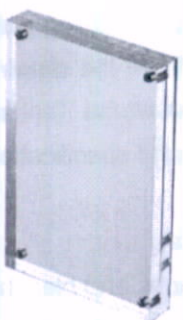
T1





T3

HARD SURFACES



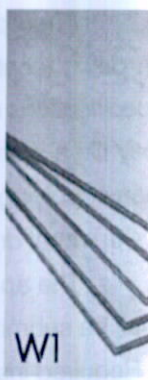
PC1



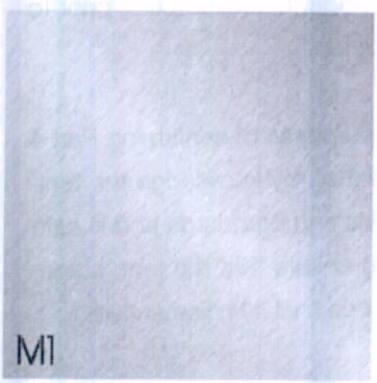
PC2



PC3



W1



M1

APPENDIX B
MATERIAL SELECTIONS

CT : EXHIBITION FLOOR. INTERFACE CARPET TILE. S302 BEIGE

T1 : EXHIBITION CURTAIN. CRUSHED TAFFETA, 100% POLYESTER. TREATED FOR FIRE RETARDANCE.

T2 : MISE-EN-SCENE STAGE BACKDROP.. CRUSHED TAFFETA, 100% POLYESTER., TREATED FOR FIRE RETARDANCE

T3 : EXHIBITION BANNER. ROSE BRAND 60" BANNER CLOTH. FIRE RETARDANT

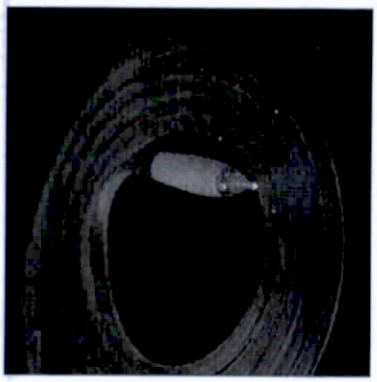
PC1 : DISPLAY BOXES. ACRYLITE OPTICAL MAR RESISTANT ONE SIDE COATED ACRYLIC.

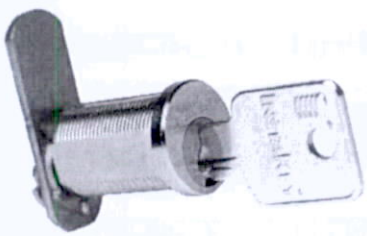
PC2 : TICKET DESK AND INTERACTIVE INSTALLATION MIRROR FRAME . ACRYLITE WHITE

PC3 : DIDACTIC PANEL. ACRYLITE REAR PROJECTION.

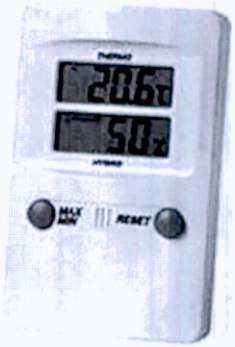
W1 : HANDS-ON DESK, NESTED STOOLS, AND DISPLAY SYSTEMS. BIRCH PLYWOOD STAINED AND FINISHED WITH ASH VENEER FINISH.

M1 : STRUCTURAL SYSTEM. WHITE ELECTROPOLISHED. STEEL PIPE.. GAUGE 2MM.





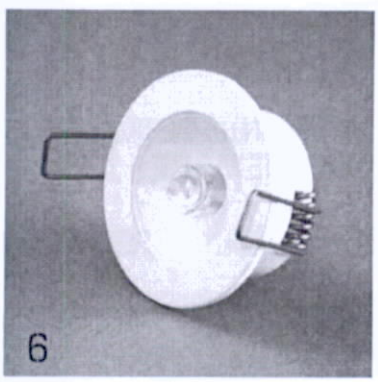
2



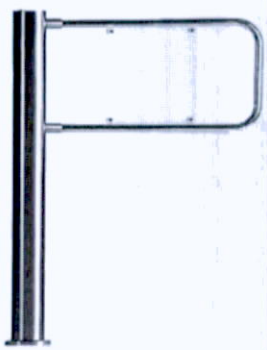
3



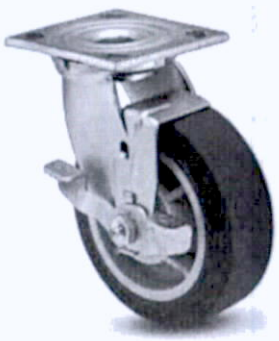
5



6



7



9



10



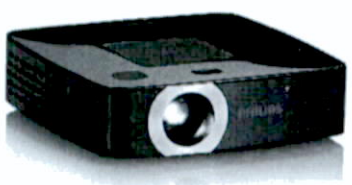
11

APPENDIX C

TECHNOLOGY AND EQUIPMENT SELECTION



4



8



12

1 : UNIVERSAL FIBER OPTICS, FIBER OPTIC LIGHTING FOR AMBIENT AND DISPLAY LIGHTING

2 : INSTAKEY 7 PIN CABINET LOCK CYLINDER FOR DISPLAY BOXES

3 : DIGITAL THERMOMETER AND HYGROMETER FOR DISPLAY BOXES

4 : IDEAL WINDOW AND DOOR CONTACT ALARM FOR SECURITY OF DISPLAY BOXES

5 : UNIVERSAL FIBER OPTICS, LIGHT CHANNEL FOR DISPLAY BOXES

6 : UNIVERSAL FIBER OPTICS, FIBER OPTIC END FITTING, SPOT LIGHT

7 : PORTABLE GATE TURNSTILE FOR EXHIBITION EXIT

8 : PHILLIPS PORTABLE PROJECTOR FOR PROJECTIONS IN THE EXHIBITION

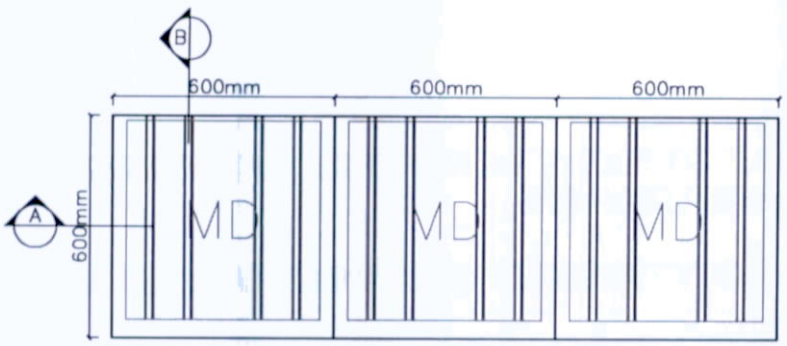
9 : CASTORS WITH BRAKE FOR TICKET DESK, HANDS-ON DESK AND INTERACTVE MIRRORS

10 : REMKO PORTABLE SPLIT SYSTEM AIR CONDITIONER FOR KEEPING THE EXHIBITION SPACE IN OPTIMAL TEMPERATURE AND HUMIDITY

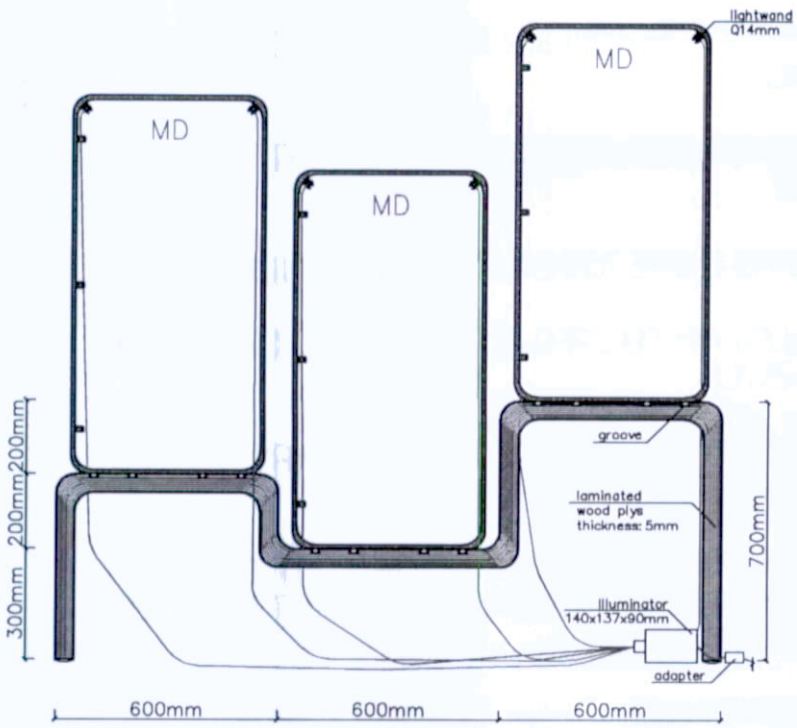
11 : FIRE SAFETY BOX

12 : EXHIBITION BANNER LIGHT

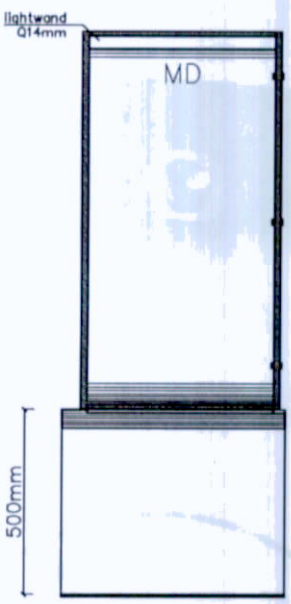
DISPLAY SYSTEM TYPE 1



Display System Type 1 Plan, 1/20 scale

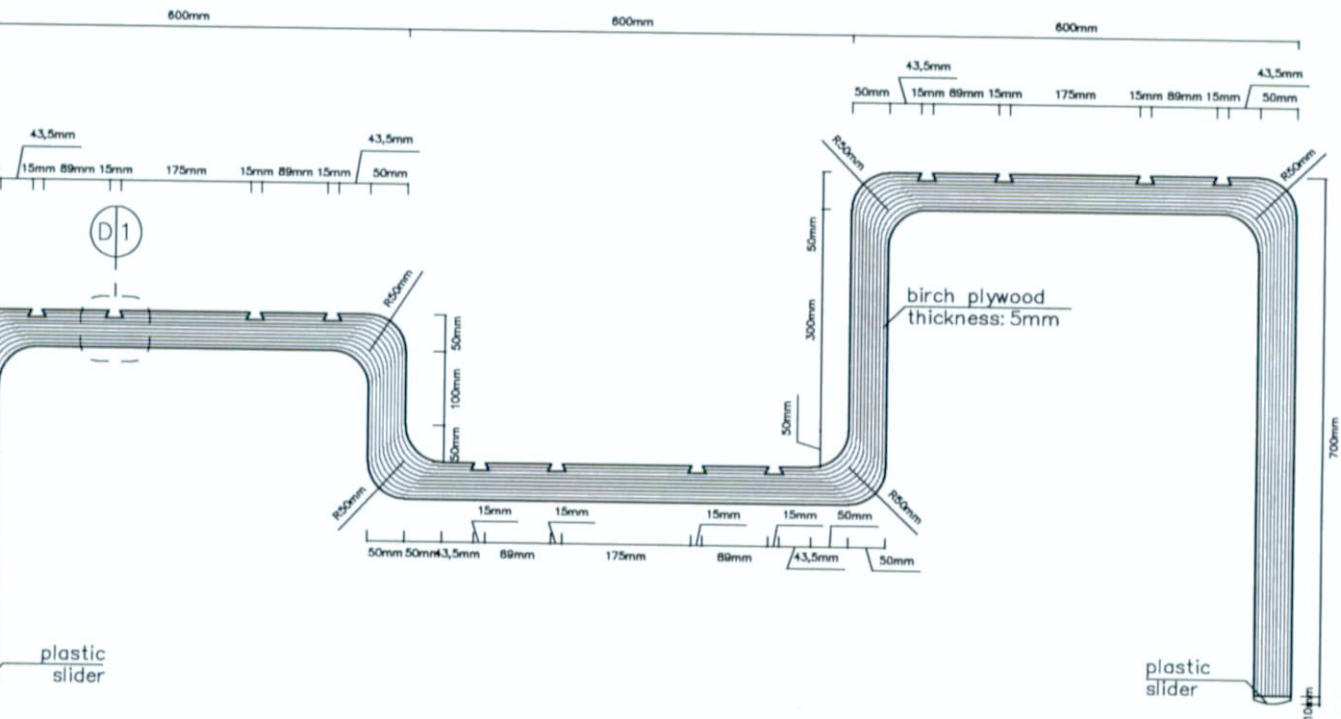


Display System Type 1 A-A Section, 1/20 scale



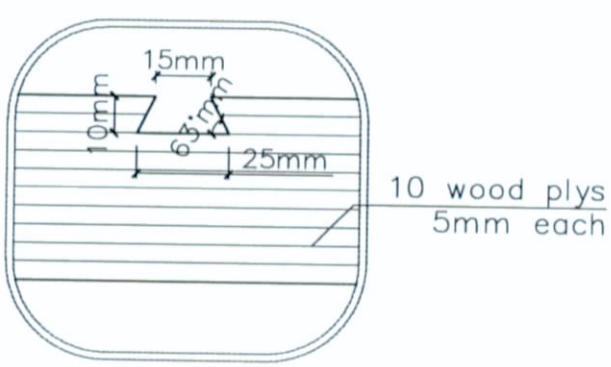
Display System Type 1 B-B Section, 1/20 scale

APPENDIX D
CONSTRUCTION DRAWINGS



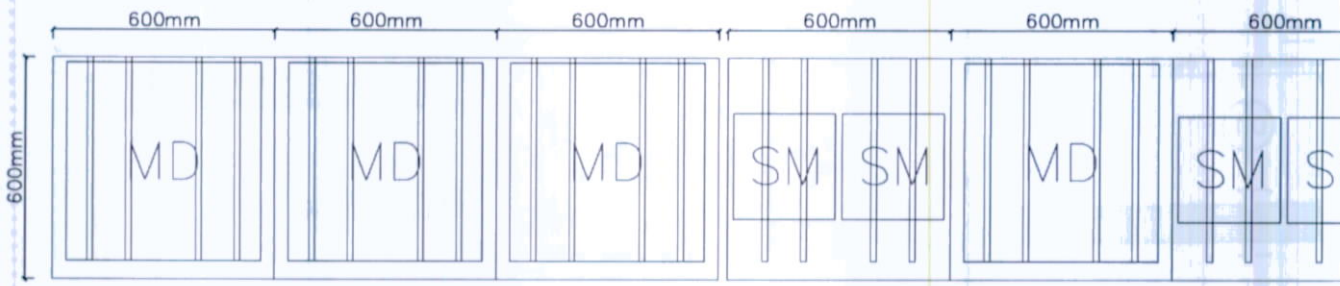
LAY SYSTEM TYPE I A—A ENLARGED SECTION
1/5 1mm=0.20mm

Display System Type 1 Section, 1/10 scale

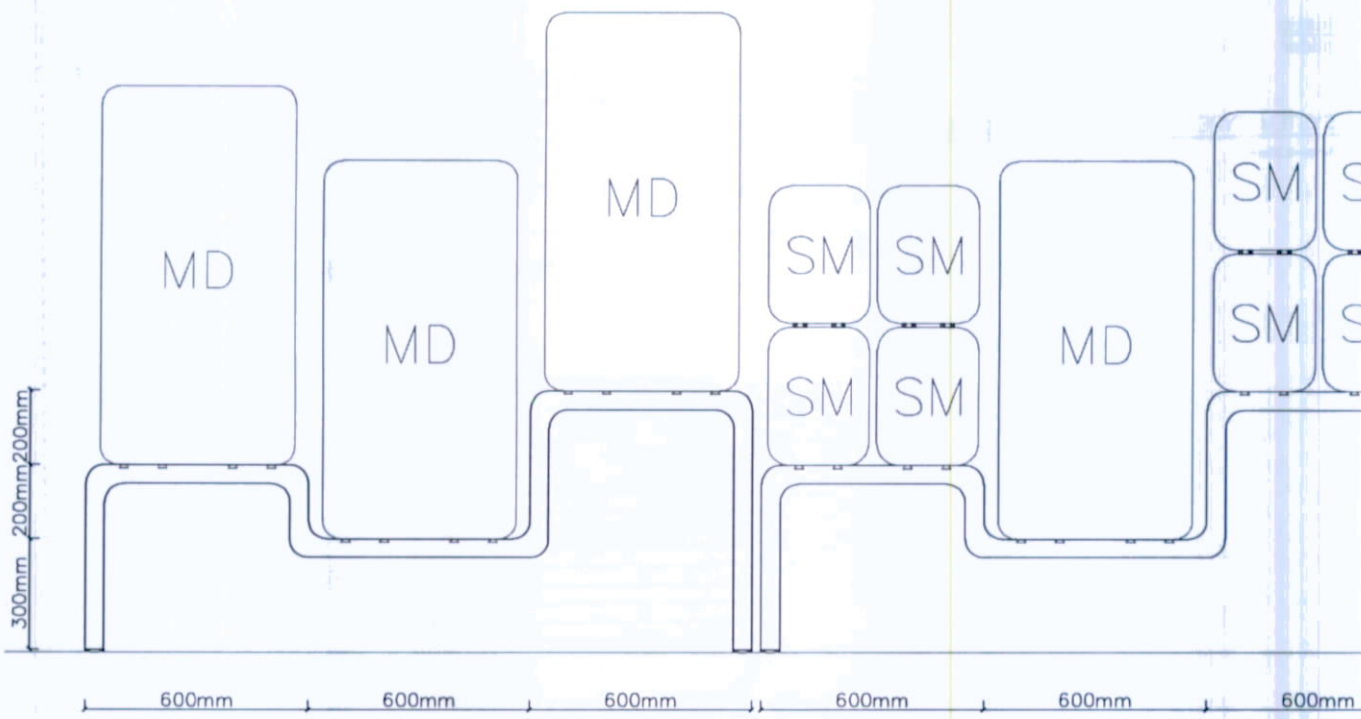


Display System Type 1 Groove Detail, 1/2 scale

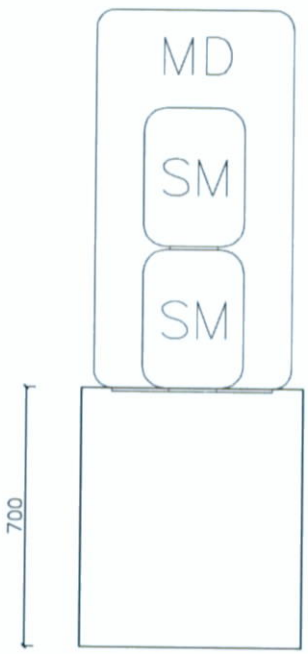
DISPLAY SYSTEM TYPE 1



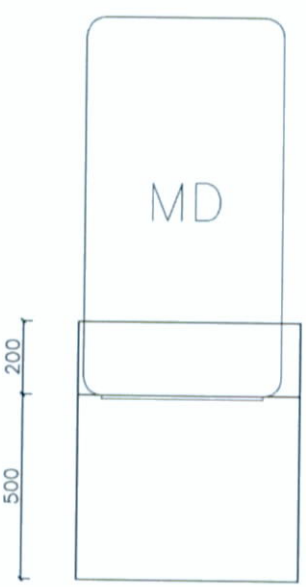
Display System Type 1 Plan as in Layout 1, 1/20 scale



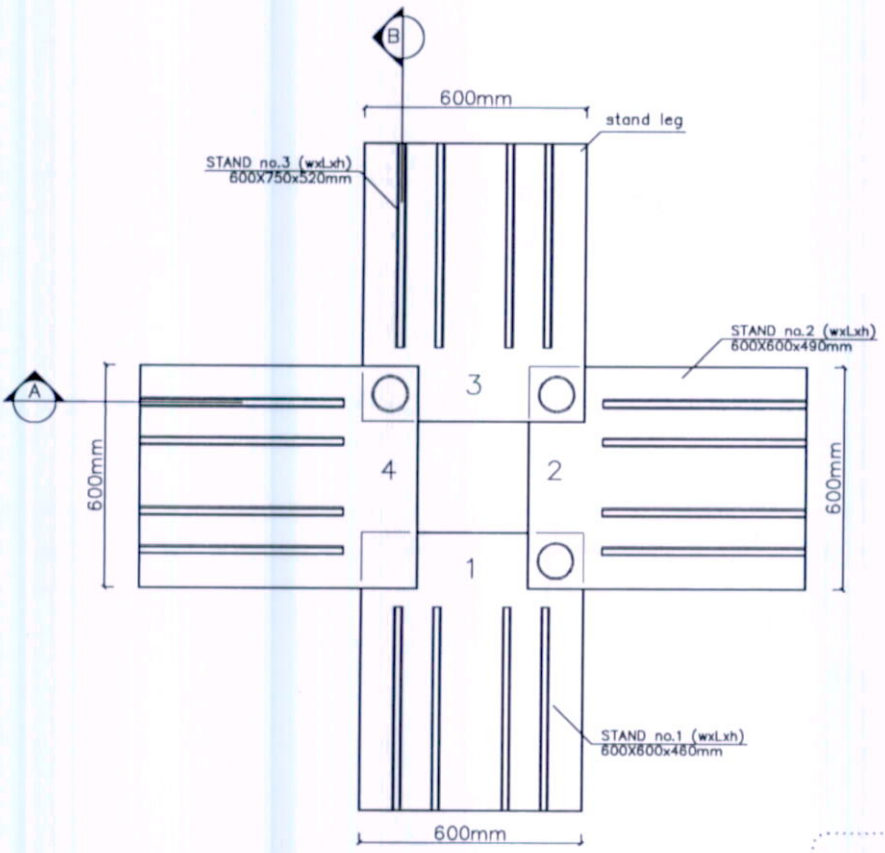
Display System Type 1 Front Elevation as in Layout 1, 1/20 scale



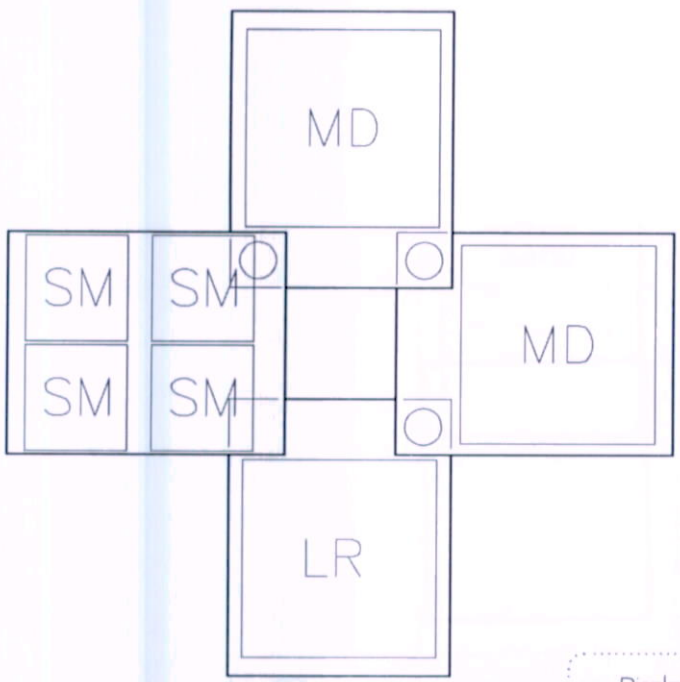
Display System Type 1 Elevation as in Layout 1, 1/20 scale



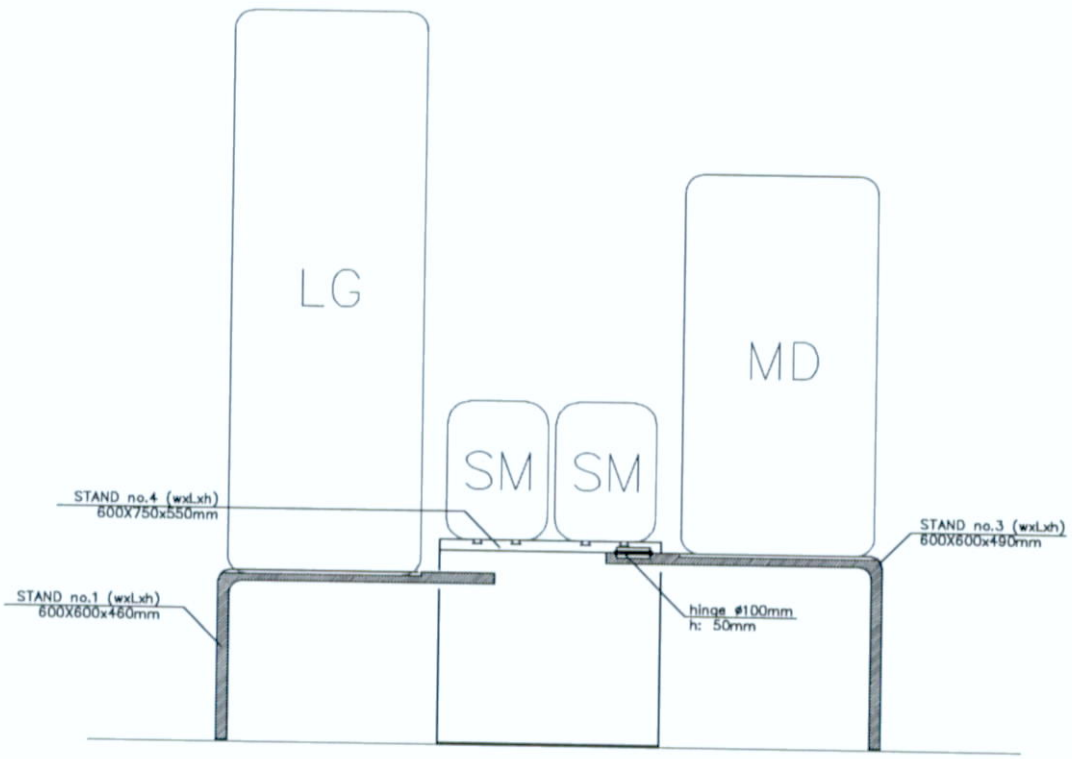
Display System Type 1 Elevation as in Layout 1, 1/20 scale



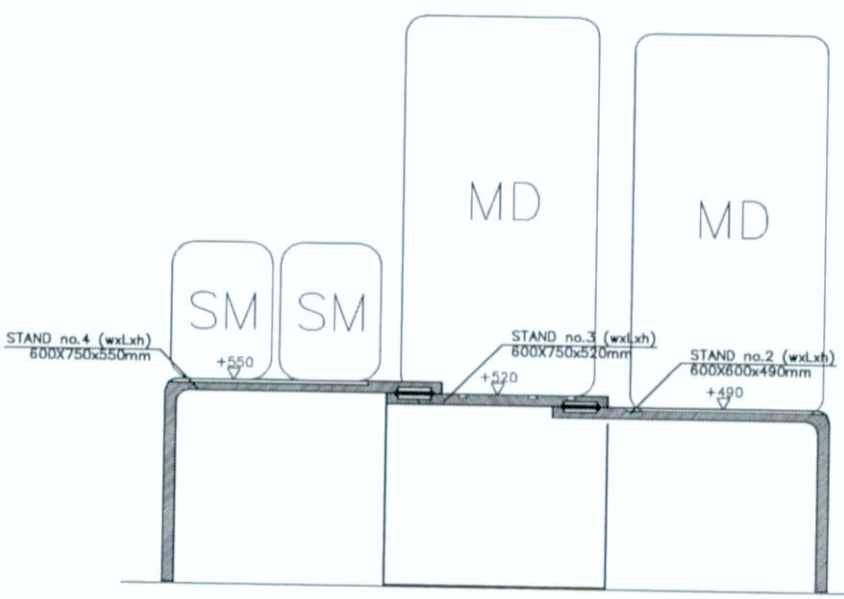
Display System Type 2 Plan, 1/20 scale



Display System Type 2 Plan with boxes, 1/20 scale

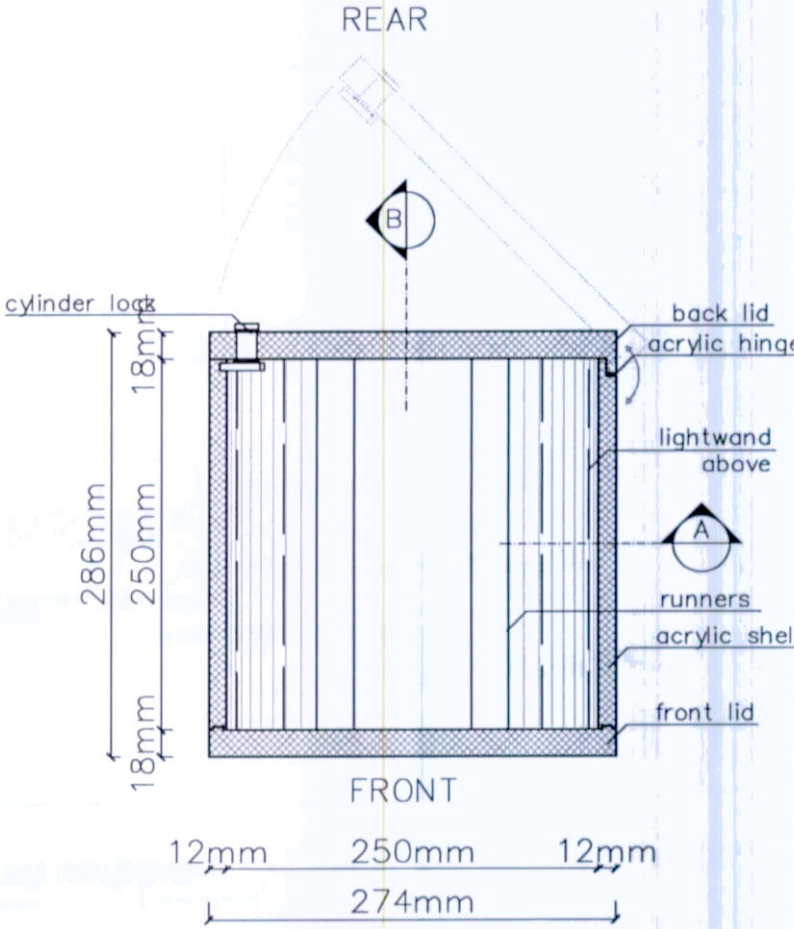


Display System Type 2 Front Elevation, 1/20 scale

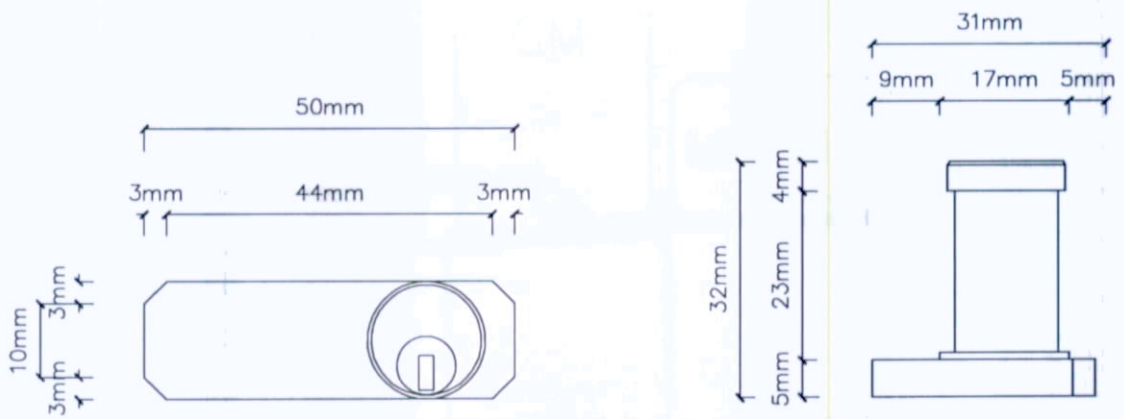


Display System Type 2 Front Elevation, 1/20 scale

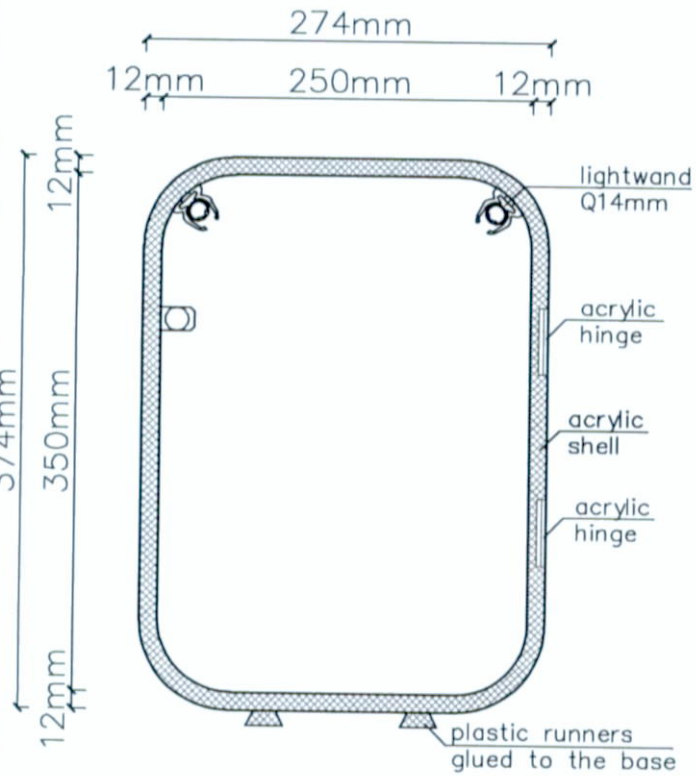
SMALL DISPLAY BOX



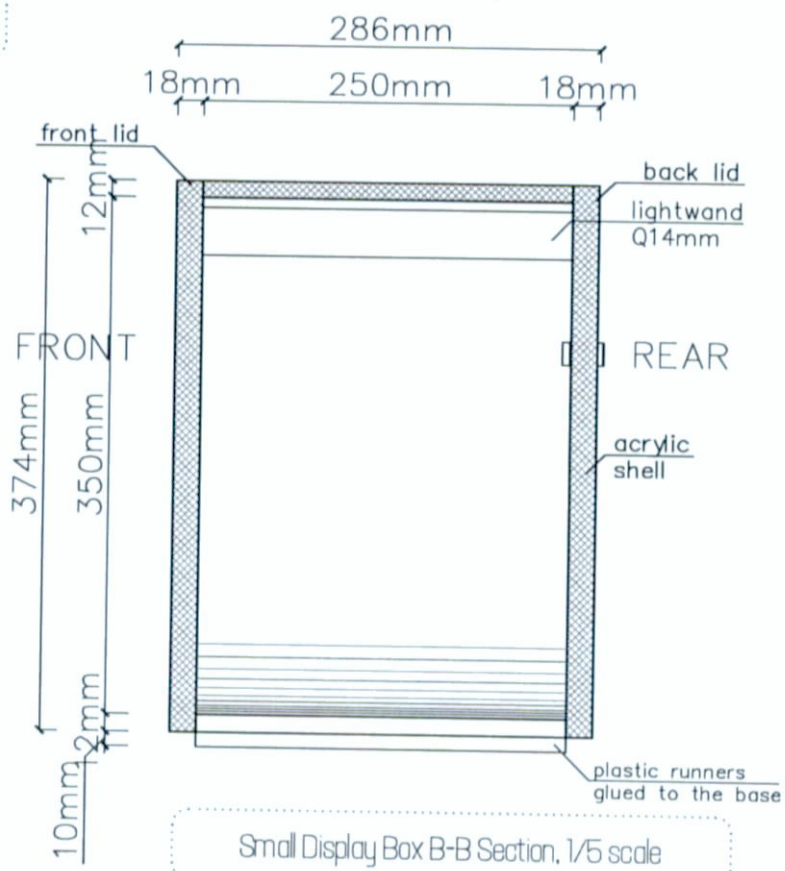
Small Display Box Plan, 1/5 scale



InsstaKey 7 pin Lock Cylinder, 1/1 scale

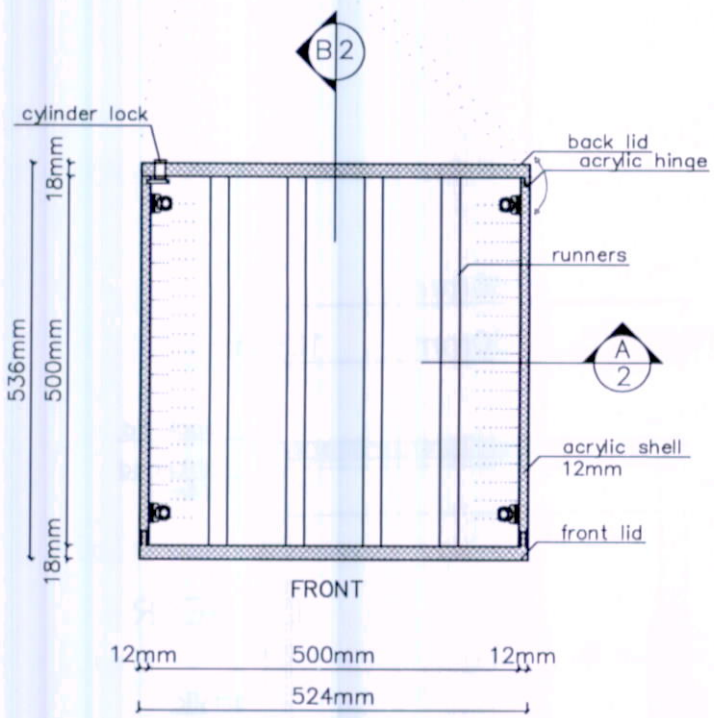


Small Display Box A-A Section, 1/5 scale

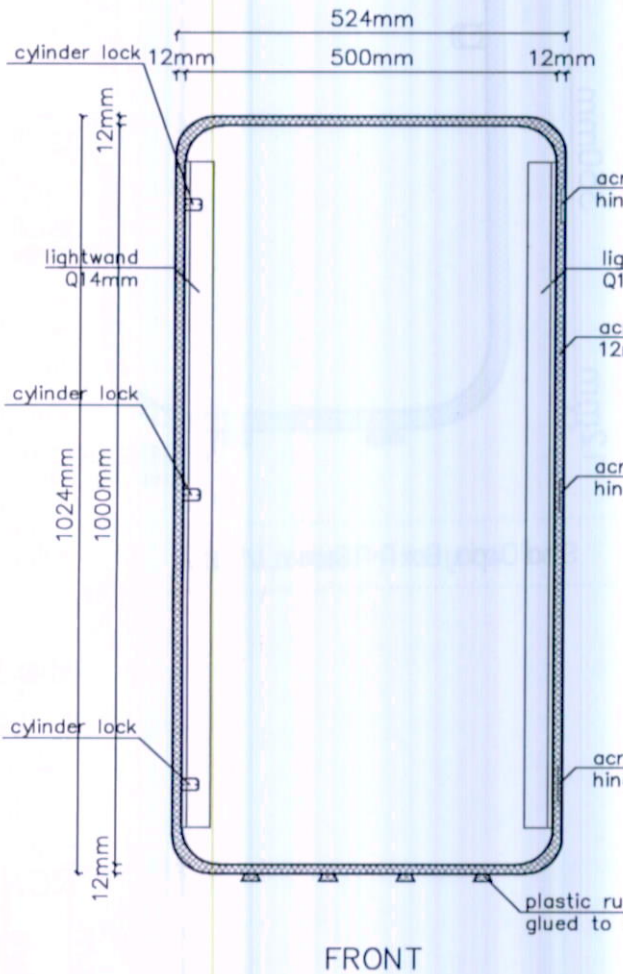


Small Display Box B-B Section, 1/5 scale

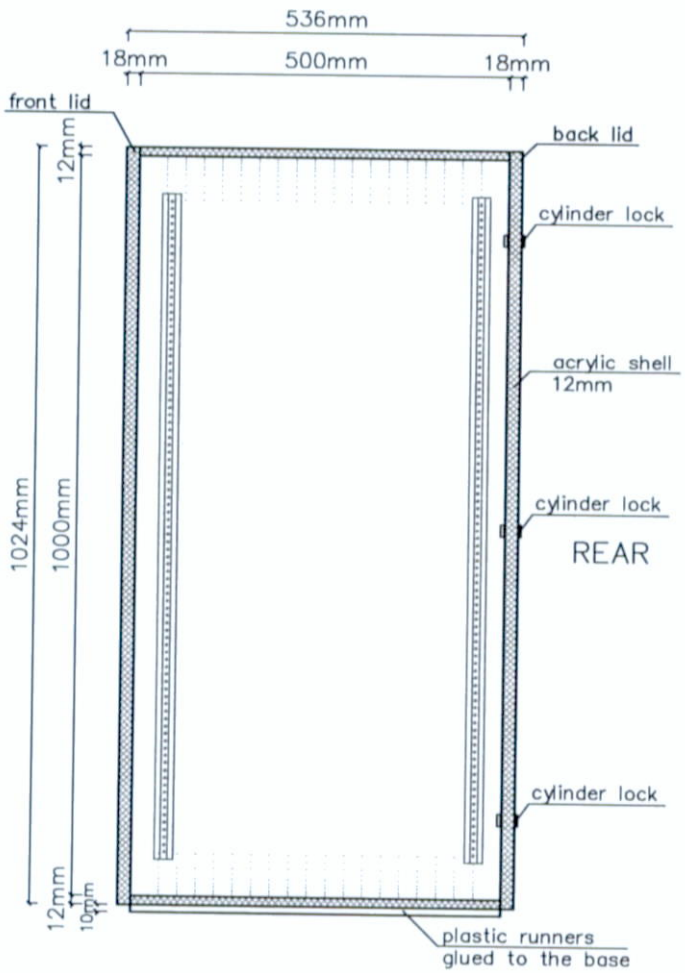
MEDIUM DISPLAY BOX



Mediium Display Box Plan, 1/10 scale

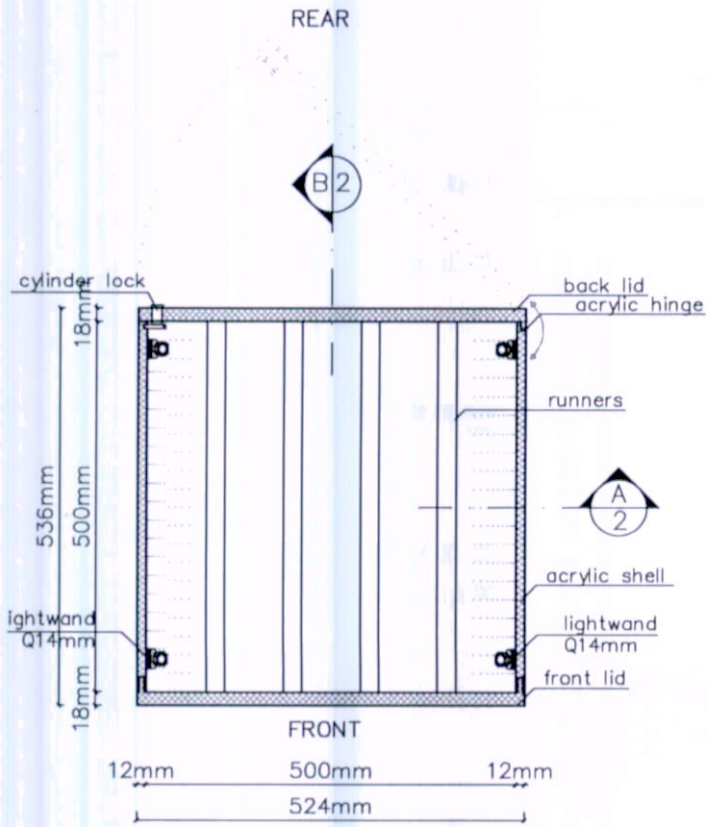


Mediium Display Box A-A Section, 1/10 scale

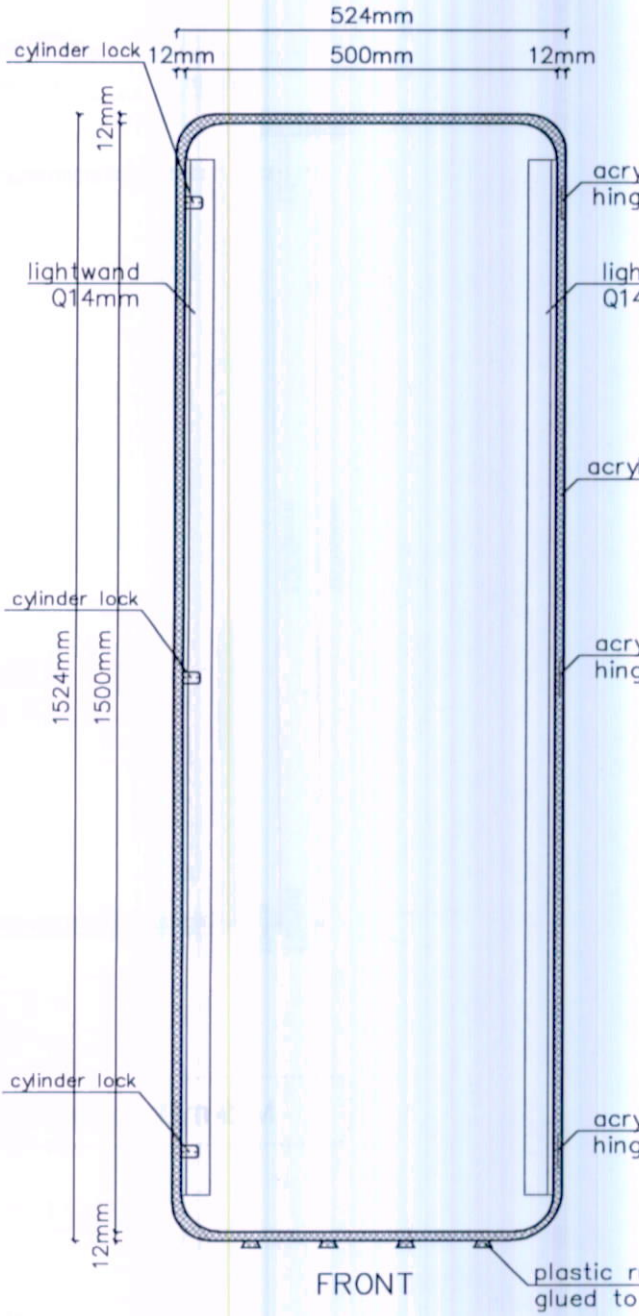


Medium Display Box B-B Section, 1/10 scale

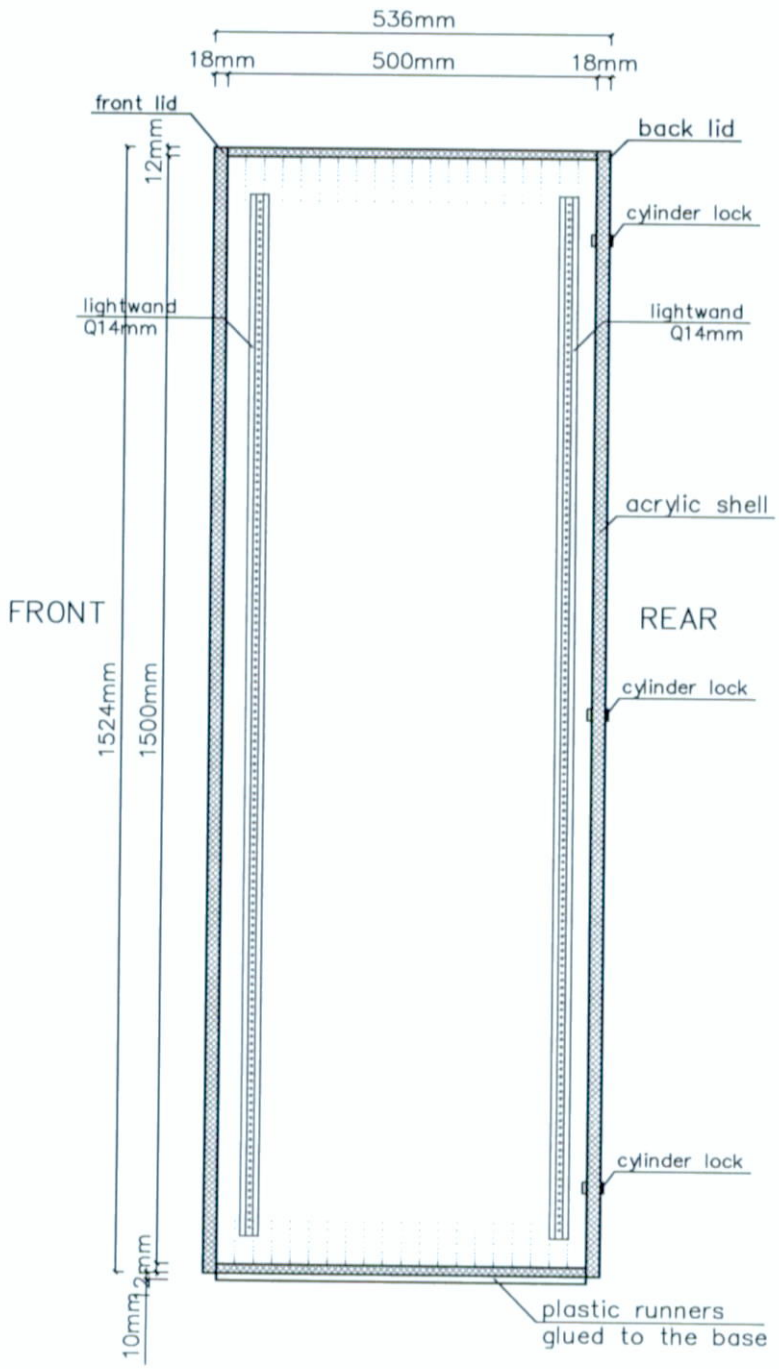
LARGE DISPLAY BOX



Large Display Box Plan, 1/10 scale

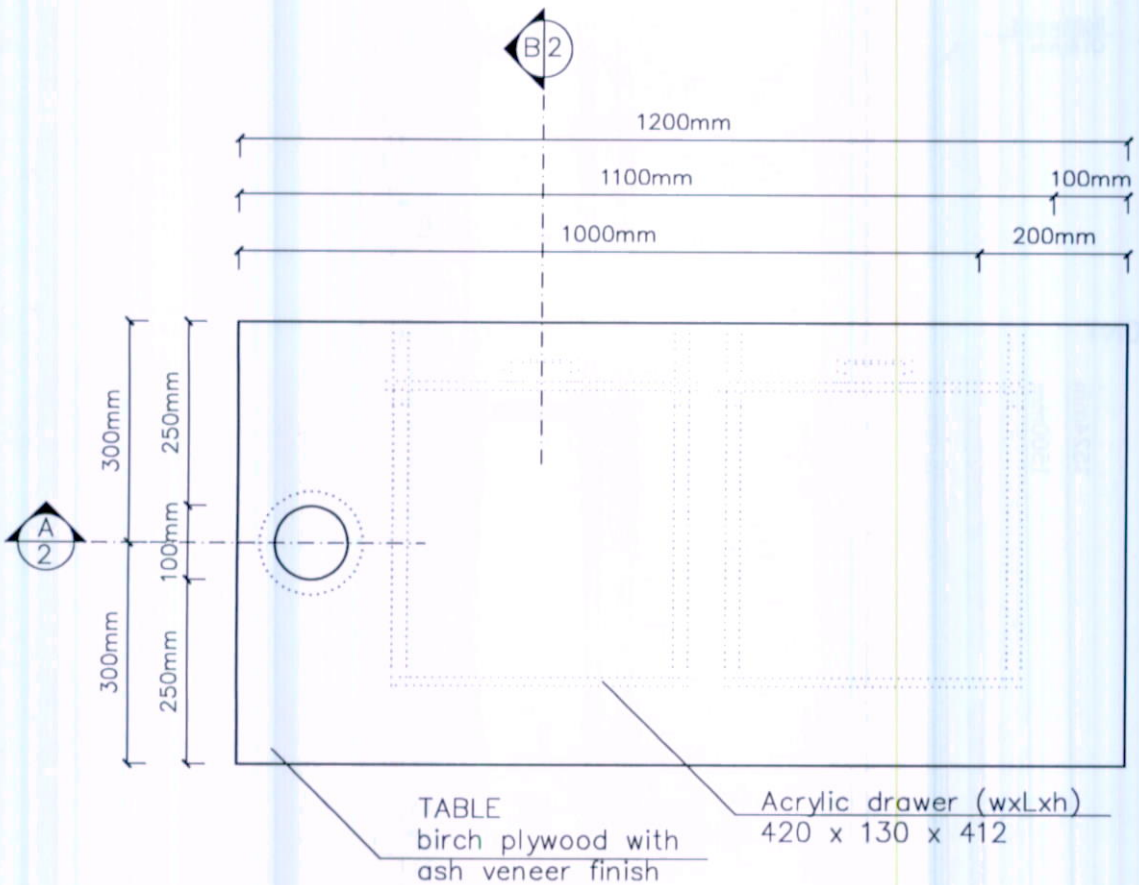


Large Display Box A-A Section, 1/10 scale

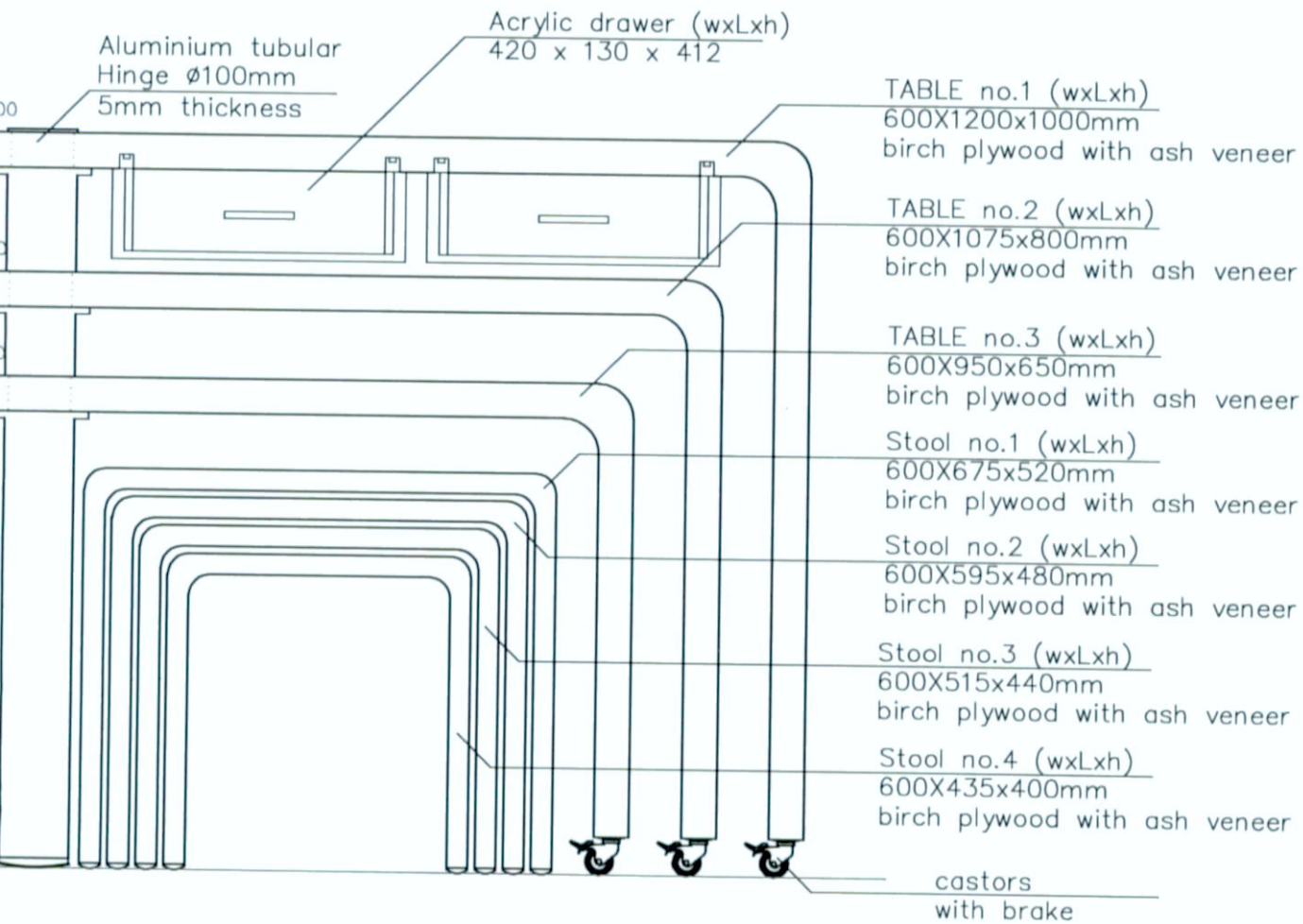


Large Display Box B-B Section, 1/10 scale

HANDS-ON DESK AND NESTED STOOLS

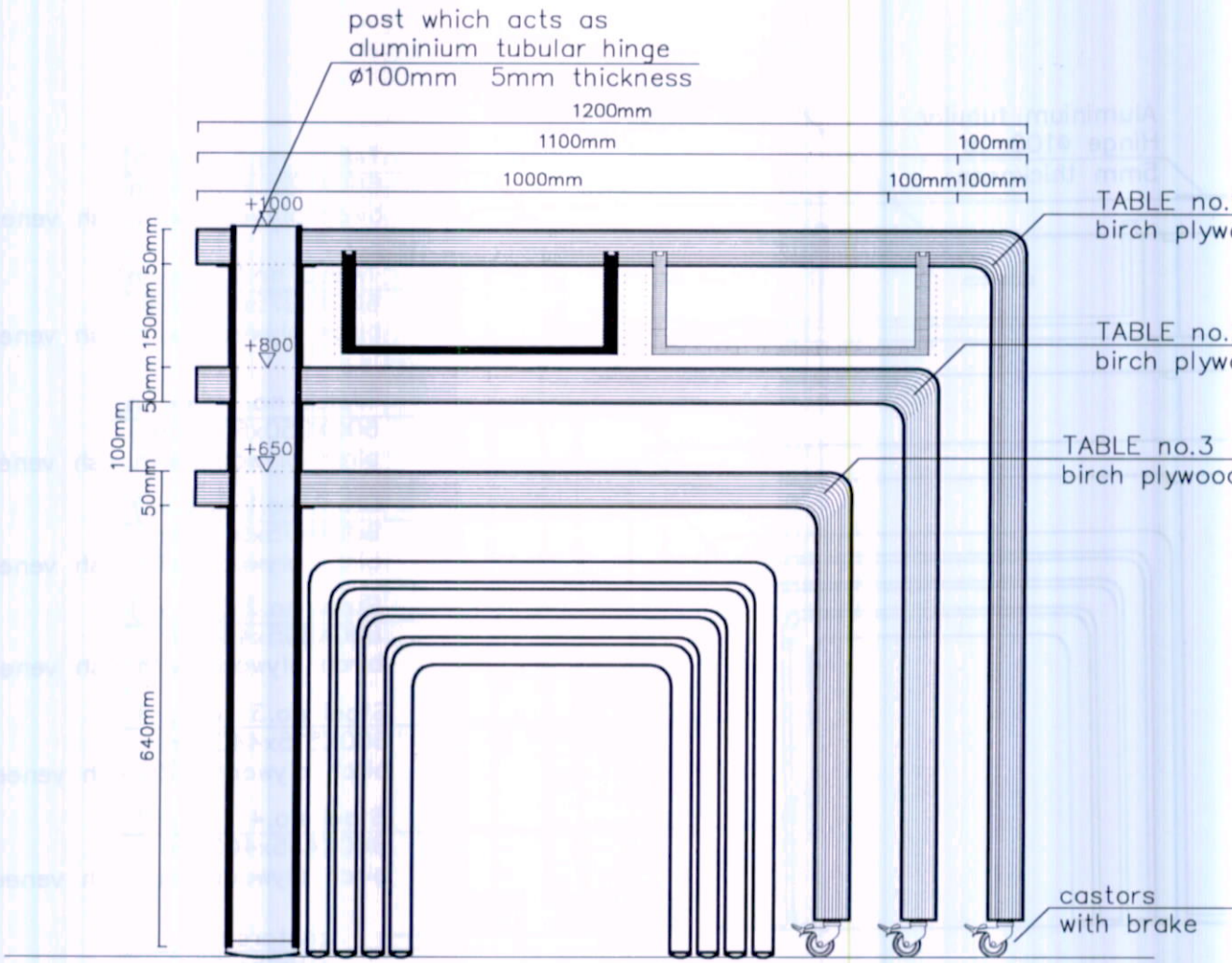


Hands-on Desk Plan, 1/10 scale

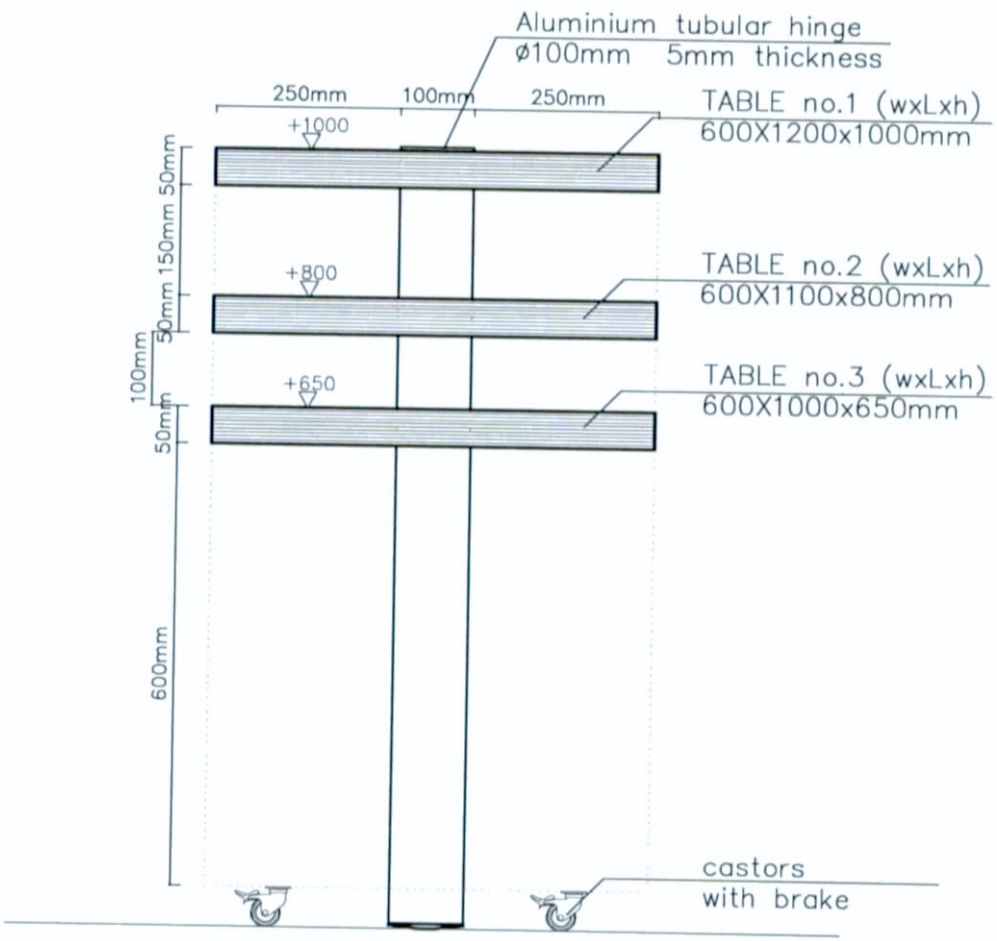


Hands-on Desk Front Elevation, 1/10 scale

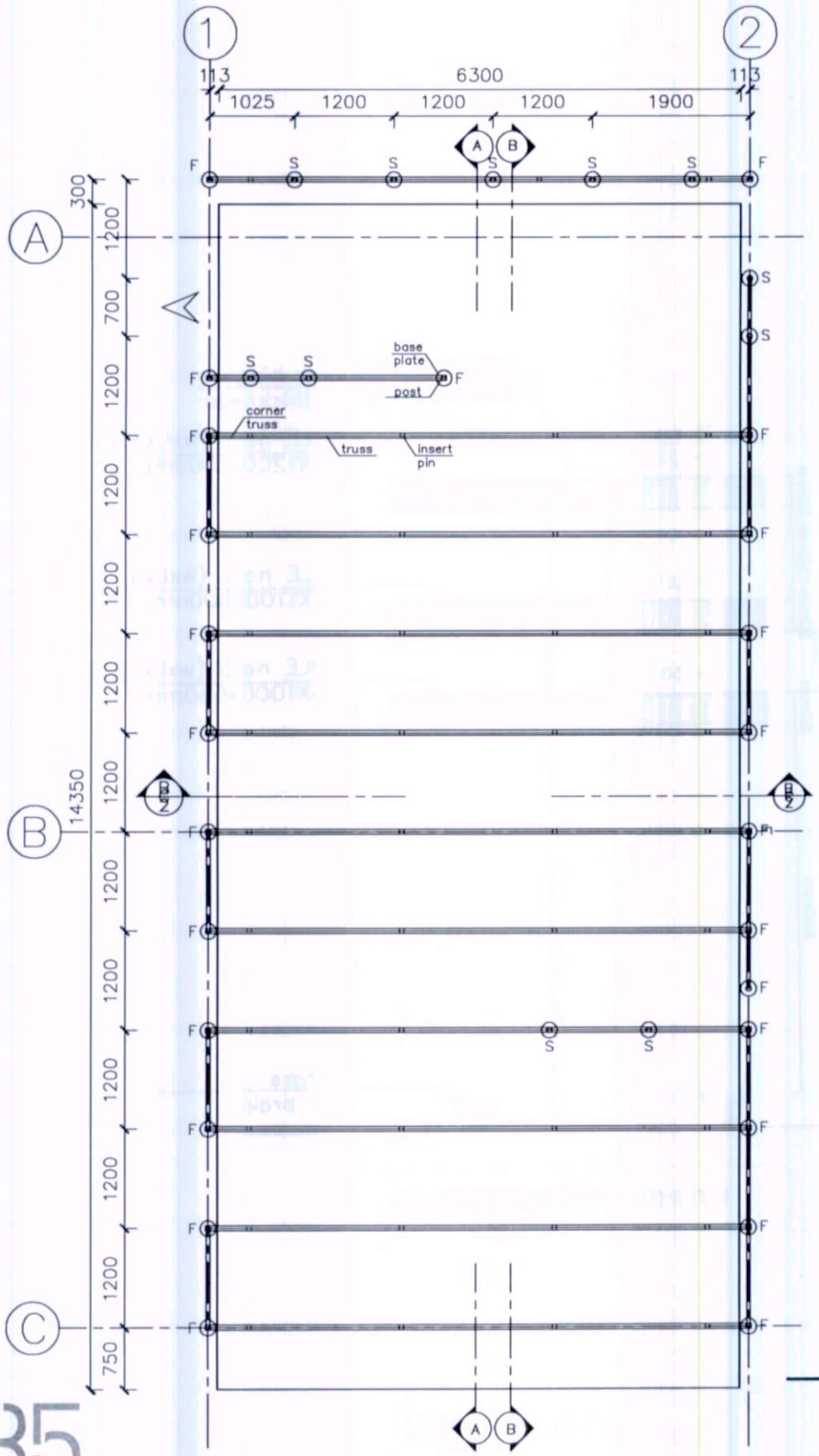
HANDS-ON DESK AND NESTED STOOLS (CONTINUED)



Hands-on Desk A-A Section, 1/10 scale

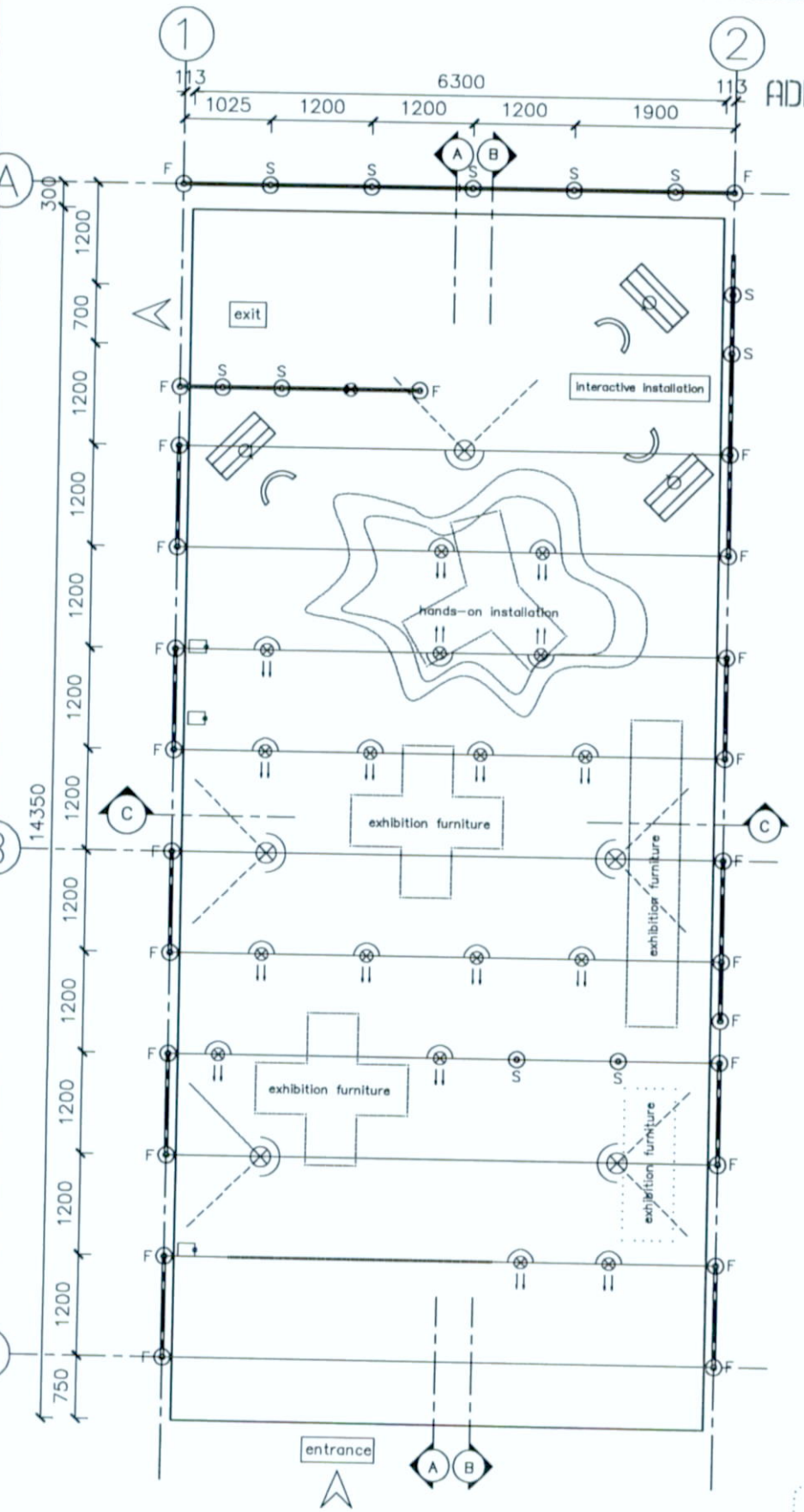


Hands-on Desk B-B Section, 1/10 scale



Layout 1 Construction Plan

APPENDIX E
ADDITIONAL DRAWINGS



N

Column Legend

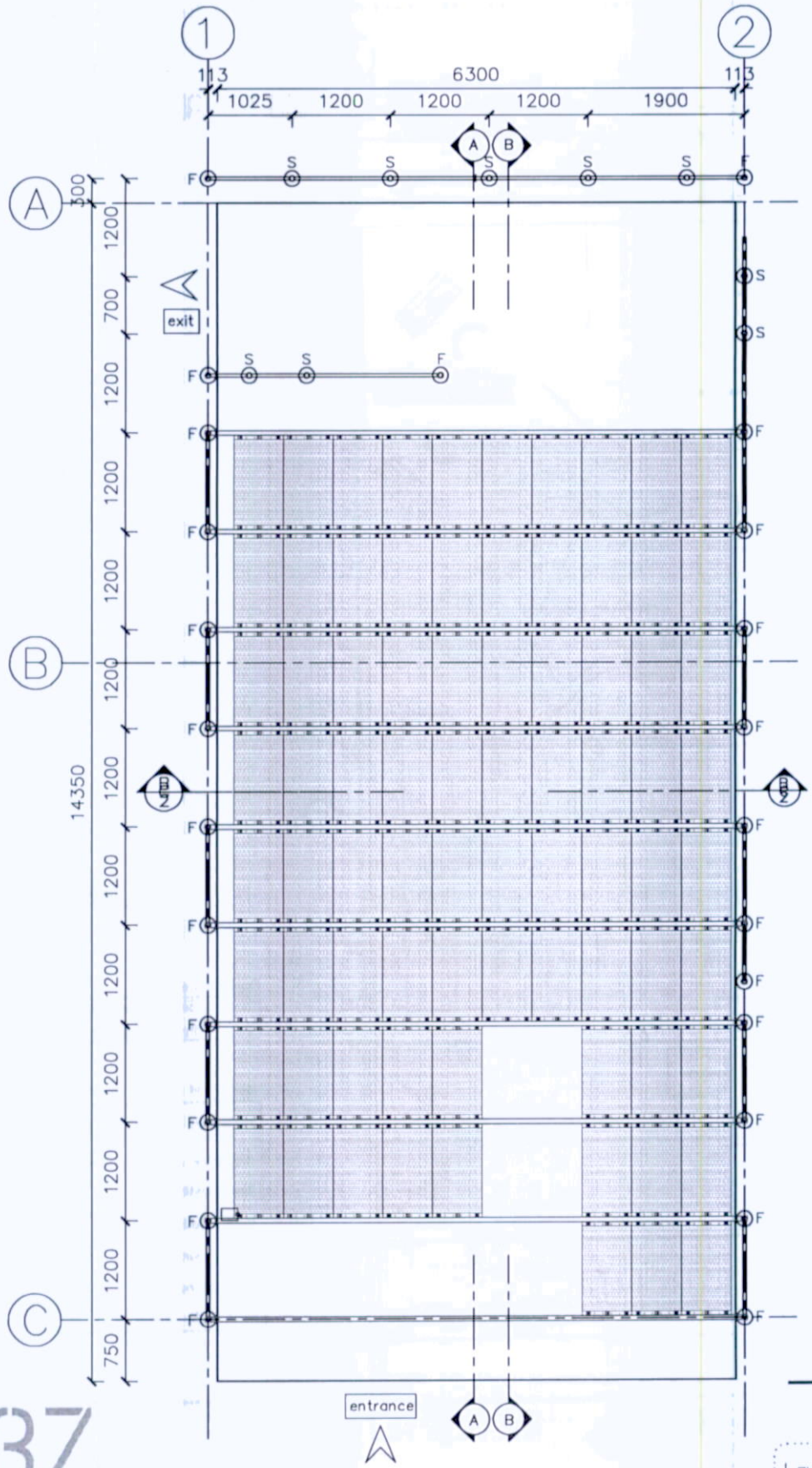
S	: Single column
F	: Frame column

Lighting and Electrical Systems Legend

Projector	
Projection angle	
Spot Lighting	
Duplex Outlet	
Panel mounted light	
Exit Lighting	
Fiber Optic Diffuser	

500mm 1000mm 1500mm

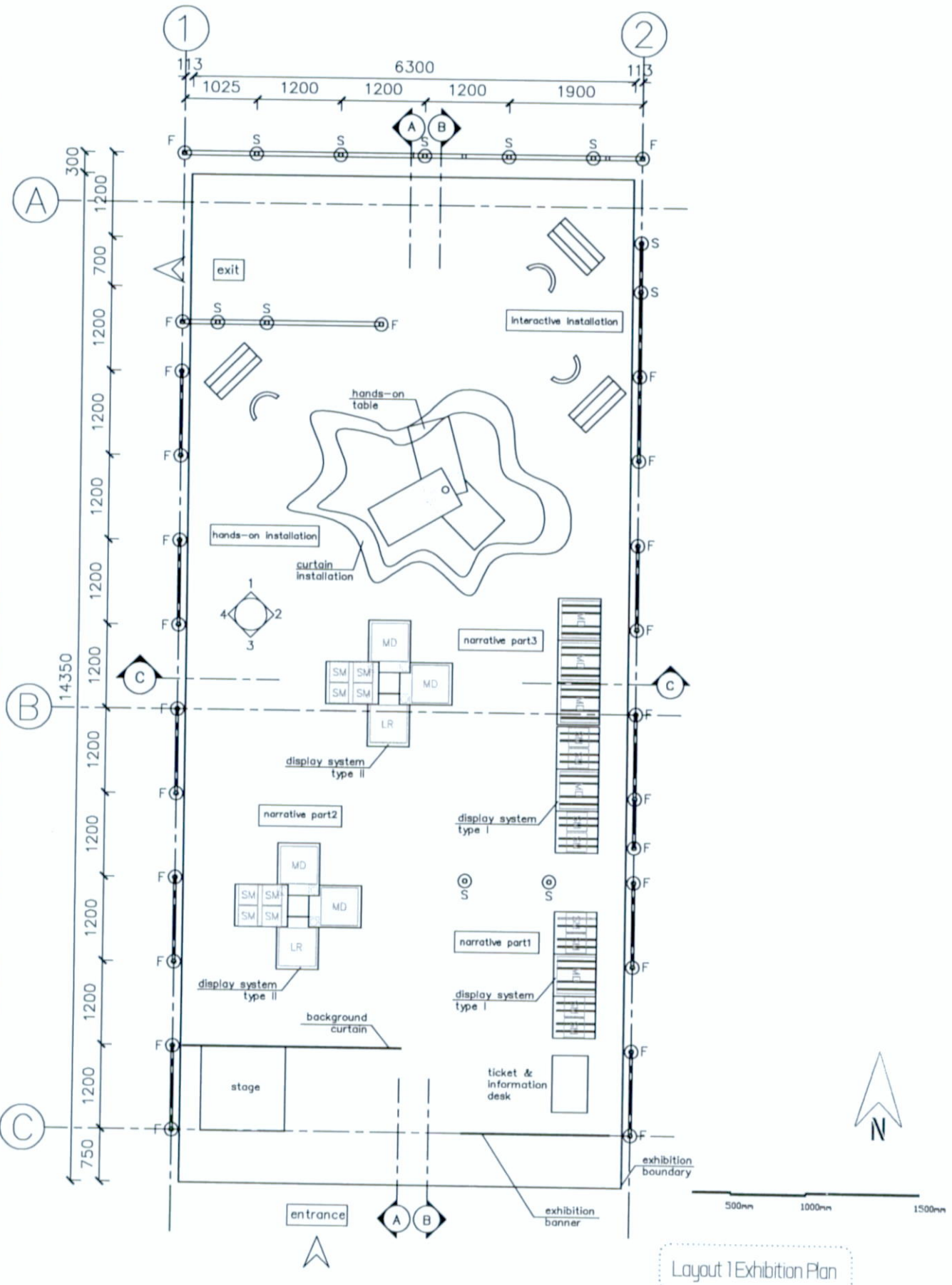
Layout 1 Lighting Plan



N

500mm 1000mm

Layout 1 Shading System Plan



Layout 1 Exhibition Plan