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Interpersonal Interactions in the New Circus

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INTERPERSONAL INTERACTIONS IN THE NEW CIRCUS

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Abstract

This thesis will focus on the design of a ‘new circus’ building that will be developed from the study of interaction between different user groups within the context of the ‘new circus.’

The premise is that a much richer understanding of the needs of particular users of the space will lead to a more considerate design of the ‘new circus’ building. Understanding the needs of the users of the ‘new circus’ will enhance the experience of the performers and the audience while providing maximum flexibility for the ever-changing needs of the ‘new circus’ art form. The exploration of the terms performance and users as related to the study will lead to an evaluation of the history of the circus upon these terms. Particular emphasis will be placed on the ways members of user groups perceive each other as a group, as well as the ways individuals within a user groups perceive others in their own group.

Architecture and the design of interior spaces has inherent to it the power of guiding users experiences through space. The ‘new circus’ building as an experiential architectural place appends the additional element of theatrical performance to the day-to-day interactions of people in the space.

These interactions between people, using all senses: visual, auricular, tactile, and impressional, are not only the premise for the ‘new circus’, but inherent to the architecture of the place. Adding to this mélange the experiential memory of the users concerning not only the architectural place, but also more importantly the memory of the other users - the circus as a place of joy and carefreeness - the circus becomes a mecca of sensory experiences.

The research component strives to explore the above raised issues in a challenging interior design that aims to graft the ‘new circus’ building within a neo-Greco-Roman building that dates from 1912. The research will evaluate existing models and discern from them the concepts and applications and from this establish techniques and methods for activating the architectural space.

The design component will manifest in an architecture as expressive and thoughtful as the art performed within its confines.
**List of Images**

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image 1</td>
<td>Circus Center logo</td>
<td>36</td>
</tr>
<tr>
<td>Image 2</td>
<td>Pickle Family Circus arena</td>
<td>37</td>
</tr>
<tr>
<td>Photo by Terry Lorant, Credit Performing Arts Library, San Francisco. Taken from Albrecht, <em>The New American Circus.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 3</td>
<td>Lu Yi, Circus Center</td>
<td>37</td>
</tr>
<tr>
<td>Image 4</td>
<td>Existing Circus Center exterior</td>
<td>38</td>
</tr>
<tr>
<td>Photo by author, 2003.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 5</td>
<td>Existing Circus Center gymnasium</td>
<td>42</td>
</tr>
<tr>
<td>Photo by author, 2003.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 6</td>
<td>Old Moscow Circus School Building</td>
<td>46</td>
</tr>
<tr>
<td>Taken from Harris, <em>The Moscow Circus School.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 7</td>
<td>Moscow Circus School complex rendering</td>
<td>46</td>
</tr>
<tr>
<td>Taken from Harris, <em>The Moscow Circus School,</em> 1971.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 8</td>
<td>Moscow Circus swimming pool and ice rink</td>
<td>47</td>
</tr>
<tr>
<td>Taken from Harris, <em>The Moscow Circus School.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 9</td>
<td>Moscow Circus School interior</td>
<td>47</td>
</tr>
<tr>
<td>Taken from Harris, <em>The Moscow Circus School.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 10</td>
<td>Ecole Nationale de Cirque rendering</td>
<td>49</td>
</tr>
<tr>
<td>Image 11</td>
<td>British Museum rendering</td>
<td>51</td>
</tr>
<tr>
<td>Image 12</td>
<td>Penn Station rendering</td>
<td>53</td>
</tr>
<tr>
<td>Image 13</td>
<td>Palace of Fine Arts aerial</td>
<td>57</td>
</tr>
<tr>
<td><a href="http://www.inetours.com/Pages/SFNbrhds/Marina.html">www.inetours.com/Pages/SFNbrhds/Marina.html</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 14</td>
<td>brown-paper sketch by Bernard Maybeck</td>
<td>58</td>
</tr>
<tr>
<td>Credit Hans Gerson, 1912. Taken from Newhall, <em>San Francisco's Enchanted Palace.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 15</td>
<td>Palace of Fine Arts in 1917</td>
<td>59</td>
</tr>
<tr>
<td>Credit California Historical Society, 1917. Taken from Newhall, <em>San Francisco's Enchanted Palace.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 16</td>
<td>Herman's Harbor View Baths</td>
<td>60</td>
</tr>
<tr>
<td>Credit California Historical Society, 1909. Taken from Newhall, <em>San Francisco's Enchanted Palace.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 17</td>
<td>Panama Pacific Exposition Ground Plan</td>
<td>60</td>
</tr>
<tr>
<td>Credit Bancroft Library - University of California, 1915. Taken from Newhall, <em>San Francisco's Enchanted Palace.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 18</td>
<td>Palace with tennis courts</td>
<td>61</td>
</tr>
<tr>
<td>Credit San Francisco Recreation and Park Department, 1934-41. Taken from Newhall, <em>San Francisco's Enchanted Palace.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 19</td>
<td>Statuary storage in Palace</td>
<td>61</td>
</tr>
<tr>
<td>Photo by Gordon Stone. Taken from “Vandals Wrecking Fine Arts Palace,” <em>SF Examiner</em> 10 October 1962.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 20</td>
<td>Palace in 1964</td>
<td>61</td>
</tr>
<tr>
<td>Credit Aero Photos, 1964. Taken from Newhall, <em>San Francisco's Enchanted Palace.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 21</td>
<td>Exploratorium</td>
<td>62</td>
</tr>
<tr>
<td>Copyright Exploratorium, 1994. <a href="http://www.exploratorium.edu">www.exploratorium.edu</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 22</td>
<td>Palace from Marina neighborhood</td>
<td>65</td>
</tr>
<tr>
<td>Photo by author, 2003.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 23</td>
<td>Doyle Drive ramp</td>
<td>66</td>
</tr>
<tr>
<td>Photo by author, 2003.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 24</td>
<td>Presidio buildings</td>
<td>66</td>
</tr>
<tr>
<td>Photo by author, 2003.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image 25</td>
<td>Golden Gate Bridge</td>
<td>68</td>
</tr>
<tr>
<td>Photo by author, 2003.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Table of Contents

## Thesis Document

**Abstract** .......................................................... ii  
**List of Images** .................................................. iv

### Chapter One

1.1 Introduction .................................................. 2  
1.2 Users, Performance, and Circus ............................. 5  
1.3 Interaction of the Senses ................................... 21  
1.4 Seeing and Being Seen ...................................... 24  
1.5 Architectural Assemblage of the Circus .................. 31

## Programming Document

### Chapter Two

2.1 Client Identification ........................................ 36  
2.2 Circus Center Background and Philosophy ................. 37  
2.3 Description of Client’s Operation ........................... 40  
2.4 Client Goals ................................................ 43

### Chapter Three

3.1 Program Precedents  
3.1.1 The Moscow Circus School ............................. 46  
3.1.2 Ecole Nationale de Cirque ............................... 49  
3.2 Building Precedents  
3.2.1 The British Museum .................................... 51  
3.2.2 New Penn Station in Farley P.O. Bldg. ................. 53

### Chapter Four

4.1 Project Goals and Design Issues ........................... 54  
4.2 The Site  
4.2.1 General Description and History ...................... 57  
4.2.2 Geographical Setting .................................. 63  
4.2.3 Location and Access .................................... 64  
4.2.4 Context ..................................................... 65  
4.2.5 Adjacent Buildings ....................................... 66  
4.2.6 Views ....................................................... 68  
4.2.7 Climatology .............................................. 68  
4.2.8 Geological Considerations .............................. 71  
4.2.9 Parcel Information ...................................... 73  
4.2.10 Other Site Issues ...................................... 74

### Chapter Five

5.1 Building  
5.1.1 Location .................................................. 75  
5.1.2 Building Properties ..................................... 76  
5.2 Program Spaces  
5.2.1 Front of House Spaces .................................. 79  
5.2.2 Grand Chapiteau ......................................... 86  
5.2.3 Back of House Spaces .................................. 92  
5.2.4 Training Spaces ......................................... 101  
5.2.5 Facility Support Spaces ................................. 106  
5.3 Program Summary ............................................ 111

## Bibliography .................................................... 113  
## Appendices
Chapter One

1.1 Introduction

My particular interest is the utilization of Circus as a powerful, uplifting, transformational performing ritual whose capacities to connect directly the fundamental spirit and soul of its audience to the bodies and spirits of the performers enable an uplifting and healing. When one leaves a good circus, one feels cleansed and healed, in part because one’s inner child has been nurtured, in part because one’s wise soul has been reconnected to the beauty and strength that is possible in the world. Accordingly, I have no interest in those forms of Circus where the inherent honesty, purity, and dignity of Circus are perverted by exhibitionism, the easy or dishonest trick, or commercial exploitation. Any perversion of Circus leaves the audience dishonored and unfulfilled. The single ring with its focused energy is an unforgiving performance space.

- Alan Slivka, Big Apple Circus

This thesis will focus on the paths of interaction between different user groups within the context of the new circus. The premise is that a much richer understanding of the needs of the particular users of the space will lead to a more considerate design of the new circus building. Better understanding of the user will enhance the experience of the performers and the audience while providing maximum flexibility for the constantly changing needs of the ‘new circus’ art form.

I find this of particular interest due to the recent resurgence of the older, European models of the circus, now termed ‘new circus’. It is described in detail later in the text, as performance and as an educational setting where

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students are taught the art of the ‘new circus’. Although these arts have blossomed considerably since the success of the internationally acclaimed troupe Cirque Du Soleil, in the United States the new circus still lack performance spaces designed for their needs.

Thus, the need to design spaces that specifically cater to the needs of the ‘new circus’ is urgent. While performing arts centers often account for the needs of the vocal and traditional dance performances, the ‘new circus’ requires adaptation and special care in the design of performance space as the user relationships, particularly between the audience and the performers, continue to evolve.

The design portion of this thesis will be for the resident troupe, the New Pickle Circus, located at Circus Center in San Francisco, California.

In the section 1.2 I will define what is meant by users, performance, and circus both in general terms and in terms specific to the ‘new circus.’ In section 1.3 I will elaborate on the tem performance as specific to the interactions between people. I will look specifically at the interaction between performer and audience and between the people in the audience. In section 1.4 I will discuss in more detail the interactions between the people in the audience as well as relating that back to broader social terms. In section 1.5 I will analyze the information I have found in my research as specifically related to the design of
a ‘new circus’ building. This analysis will keep in the forefront designing with regard to interpersonal interactions.

In conclusion I hope this work finds a better understanding of the ‘new circus’ and the design of spaces appropriate for its display.
1.2 Users, Performance, and Circus

In this section I will define what is meant by users, performance, and circus both in general terms and in terms specific to the ‘new circus.’

The new circus troupe can be seen as a community and as such designing for this community requires an understanding of its cultures. In this context, a community as defined by the American Heritage Dictionary of the English Language is “a group viewed as forming a distinct segment of society.”

While this definition is distinct from the common interpretation of the term as a group of people living in proximity to one another, it helps to define the circus troupe as a community within its own culture. The fact that communities can include what occurs within the ‘new circus’ can help us understand why in her provocative look at the term ‘community,’ Miranda Joseph states her argument

...against the idealization of community as a utopian state of human relatedness and, more important against the idea that communities are organic, natural, spontaneous occurrences. And yet, [she does]...not suggest that invoked communities are false or inauthentic, as if there were some more authentic form of community to be found in some other time or place...

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3 Miranda Joseph, Against the Romance of Community, (Minneapolis: University of Minnesota Press, 2002), ix.
If we accept Miranda Joseph’s position that the communities occur in a number of forms we can extend the concept to a specialized user of architectural space such as the ‘new circus’ users. To one degree there are the user groups within the space defined by their functions within the space. For example, in the theatre there will be at a minimum the audience, the performers, the stagehands, the office support staff, and the janitorial staff. These user groups will all utilize the space in different ways and, in cases, at different times as well. Of particular interest are the dynamic interactions within the audience. The theatre has the tradition of being a public place to see and be seen.

In her discussion of the work of Mary Cassatt, Griselda Pollock discusses “the alternation between ‘being seen’ and ‘seeing,’ [as] being on show and being absorbed in the show.” These dynamics are the devices used for making distinctions amongst a group of people who compare, differentiate, and locate themselves within the circles of the societies that they aspire to belong. In reference to Mary Cassatt’s painting, At the Opera, from 1978, Ms. Pollock describes the female subject of the painting as such:

She is, however, seen in profile and looks across the viewer’s line of vision in a determined action. Her looking elsewhere adamantly ignores the viewer’s gaze, which finds itself confronted instead with a sketchily painted man, peering from his box deep in the pictures imaginary space.5

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5 Ibid., 144.
This description summarizes one instance of ‘being seen’ from which we can understand the possible flirtatious outcomes of being in a theatre setting. It can therefore be argued that the theatre is a place where social formations are consolidated. Erving Goffman establishes five devices for the ordering of the social formations. These are the technical, the political, the structural, the cultural, and the dramaturgical. The technical marks division in terms of efficiency and inefficiency as an intentionally organized system; the political in terms of political actions of participants; the structural in terms of the horizontal and vertical status divisions; the cultural in terms of moral values of the participants; and the dramaturgical in terms of the several performance teams that operate in the social institution. In the theatrical setting one can clearly see how the political and cultural divisions become readily apparent through institutions such as racial or economic segregation of seating arrangements as well as through the mere choice of attendance at theatrical events that often have political under or overtones. The Cassatt painting help us to understand how social structural divisions are made pronounced in the theatre setting by the dress of the attendees. Pollock also describes that through Cassatt’s work we can understand that

...the theatre was a place of fantasy and stories, of artifice and illusion, or melodrama and music, but also of tough

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intellectual demands...the site of overt sexual commerce. 7

While the separation of person’s along sexual lines may not be part of Goffman’s structure, it is certainly at play amidst society in any public setting and is at will to cross any structured division lines. Finally one can see that the dramaturgical is almost a catchall category, but if looked at in terms of the interaction of user groups it constitutes the focus of this thesis in respect to the ‘new circus.’

A performance may be defined as by the American Heritage Dictionary of the English Language as “the act or style of performing a work or role before an audience.” 8 This definition, while it may conjure images of a theatrical setting is truly all encompassing of interactions between people in day-to-day life. In fact, the mere process of going through the design and construction of any building is a grand performance in and of itself. Goffman does much to elaborate on the concept of the ‘performance’ in common interpersonal interactions. In an analogy with the theatrical arts he states,

...the stage presents things that are make-believe; presumably life presents things that are real and sometimes not well rehearsed. More important, perhaps, on the stage one player presents himself in the guise of a character to characters projected by other players; the audience constitutes a third party to the interaction – one that is essential

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7 Pollock, 144.
and yet, if the stage performance were real, one that would not be there. In real life, the three parties are compressed into two; the part one individual plays is tailored to the parts played by the others present, and yet those others do not constitute the audience.⁹

This approach then makes every move we make within the theatre setting a performance. Goffman discusses interactions as distinct in two major categories, “unfocused interaction” and “focused interaction.”¹⁰ In the setting of the theatre, the predominant type of interaction is unfocused interaction among the members of the audience, as a historically known setting to ‘see and be seen.’ Focused interaction also occurs, but much less. I find this study interesting in the context of the performing arts theatre due to the duality of the proposition – the study of interpersonal relations among all users and the interaction of performers with one another in an equally uniquely expressive manner. All of these elements combine to provide opportunities for spatial designs in one way or another.

To even attempt to seriously discuss the architecture of the circus as related to the issues of performance and community, the term ‘circus’ must first be well defined.

⁹ Goffman, The Presentation of Self in Everyday Life, xi.
¹⁰ Erving Goffman, Encounters: Two Studies in the Sociology of Interaction, (Indianapolis: The Bobbs-Merrill Company, Inc., 1961), 7. “Unfocused interaction consists of those interpersonal communications that result solely by virtue of persons being in one another’s presence, as when two strangers across the room from each other check up on each other’s clothing, posture, and general manner, while each modifies his own demeanor because he himself is under observation. Focused interaction occurs when people effectively agree to sustain for a time a single focus of cognitive and visual attention, as in a conversation, a board game, or a joint task sustained by a close face-to-face circle of contributors. Those sustaining together a single focus of attention will, of course, engage one another in unfocused interaction too.”
"One has only to look at the popular connotations of the word circus [i.e. media circus] to appreciate the low regard with which the institution has come to be held [in the United States]."1 A circus may be defined as by the American Heritage Dictionary of the English Language as

...a public entertainment consisting typically of a variety of performances by acrobats, clowns, and trained animals or a traveling company that performs such entertainments. Also, it can be a circular arena, surrounded by tiers of seats and often covered by a tent, in which such shows are performed.12

In simpler words we might call it “an exhibition of skill and daring in an arena or an enclosed space”13 The images of the Ringling Bros. & Barnum & Bailey Circus, commonly referred to by their self-dubbed nickname, ‘the greatest show on earth,’ are surely the first images that come to any American’s mind at the mention of the term. There is however, a rich history of the circus around the world that produces circuses very different from the Ringling Bros. & Barnum & Bailey Circus.

The word ‘circus,’ as related to the institution of the new circus, is derived from the word *circle*, from the presentation of horses in a circular ring.14 “We know the circus started with animals, that is why the ring is 13 meters – because that is what a horse needs to gallop

11 Albrecht, 6.
14 Dominique Jando (Associate Artistic Director, Circus Center San Francisco), in discussion with the author, October 8, 2003.
around it easily."\(^\text{15}\) It is difficult to pinpoint the exact date when the term ‘circus’ was coined, but available evidence suggests that it is an ancient tradition. John and Alice Durant summarize the history of the ‘circus’ follows: Beginning in 2400BC in Cnossus on the Isle of Crete performers were documented ‘bull leaping’ in front of crowds. This is the first documented instance of circus-like performance. The Nile Egyptians were also documented as having an abundance of street performers such as acrobats, tumblers, jugglers, and musicians. The ancient Roman Circus Maximus (a 625 yard long, 150,000 seat arena constructed in 329BC) appears in circus history books as an exhibition arena of gymnastics, rope dancing, equestrienne (acrobatic jumping between horses) as well as chariot races, and wholesale slaughter of man against man, man against beast, and beast against beast.\(^\text{16}\)

It should be stressed however that the word circus as related to this institution we know as the circus was not adapted from the Circus Maximus, although there may be similarities in some aspects of the entertainment. The violent games of the Circus Maximus had more to do with the political atmosphere of the era and less to do with pure exhibition of skill. While it is certainly arguable that skill is required to be a gladiator, these feats were not motivated by a pure desire to share an art form, but more by politics. Specifically the physical form of the Circus Maximus shows no relation to the circular origins of the circus ring. The

\(^{15}\) Albrecht, 222.
\(^{16}\) Durant, 1-310.
meaning of the word ‘circus’ has changed over time. Some groups, who advocate that the circus promotes cruelty to animals, hearken back to acts performed in the Circus Maximus as the origins of this form of entertainment, when in fact the circus’ real use of animals originated much later with the parading of horses.¹⁷

1768 marks the appearance of Philip Astley, an Englishman, on the scene as a horse trainer. He has come to be recognized as the father of the modern circus. This is the origin of the term ‘circus’ as we use it today, clearly different from the ‘circus’ of the Circus Maximus and also from street entertainers. From here on the one ring circus develops into full-blown circuses as they continue to exist in Europe and Russia to this day. As the early history of America goes, the institution of the circus came overseas from Europe but developed in its own right on this side of the ocean. In 1876 Jim McGinnis (a.k.a. James Anthony Bailey) institutes the first instance of two rival rings in one circus show in his Cooper & Bailey Circus.¹⁸

The heyday [of the American circus] saw the introduction of the first American three-ring circus (produced by Barnum & Bailey in 1881), but whether this was a step forward or not has been debated by circus lovers ever since. Many people believe that the three-ring, two-platform show is too large and bewildering...at any rate the competing circuses were soon forced to add another ring.¹⁹

¹⁷ Jando, in discussion with the author, October 8, 2003.
¹⁸ Durant, 1-310.
¹⁹ Ibid., 79.
Thus the American circus we first know today is created.

With this brief history of the American circus it should be noted alongside the European circuses, which never grew beyond the one-ring format. As American circuses tried to be ever bigger and better, the European circus became more and more refined, because it was becoming popular entertainment equal to that of the theatre, and not a child’s entertainment as it was first presented.

“Although the two [American] circus giants – Barnum & Bailey and the Ringlings – had the spotlight [during the late 1800s in America], there were numerous little ‘dog and pony’ shows...which were in great favor in rural America.”

Therefore, it is not plausible to say that America lost the one-ring circus format entirely. Instead one can argue that the one ring circus was not the predominant form of circus in the later part of nineteenth century America.

The “golden age of the American circus” occurred from 1870 to 1915, corresponding to “America’s period of greatest economic expansion.” It was not until 1942 that any attempt was made to change what was succeeding for the Ringling Bros. & Barnum & Bailey Circus, the three-ring circus show. However, in 1942 John Ringling North hired famous choreographers and composers, Igor Stravinsky, George Balanchine, Normal Bel Geddes, John Murray Anderson, and Miles White to create a new show for his

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20 Ibid., 165.
21 Albrecht, xv.
circus on “an impulse to create something resembling art.”\textsuperscript{22} This move, while significant, was rejected by the public, who saw the move as “people from the theatre and ballet [who] were tampering with a national treasure.”\textsuperscript{23} The American circus continued to resist real change, even while their popularity declined up until 1956.\textsuperscript{24} 1956 marks the beginning of the US arts movement with the groundbreaking for the Lincoln Center for the Arts in New York City, which became the premiere site in all of the US for subsidized art.\textsuperscript{25}

The Pickle Family Circus as well as other performance troupes such as Cirque Du Soleil and the Big Apple Circus began to appear in the US in this new era of the arts. When the Pickle Family Circus held their first official performance in 1975 it was held as a one-ring circus. “Cirque Du Soleil and the Big Apple Circus chose to use the one ring after the Pickles demonstrated the advantages of the small, intimate arena.”\textsuperscript{26}

Their desire to change the circus was not a rejection of circus tradition but rather a repudiation of the way in which America’s values had corrupted the more noble, pure, and ancient traditions of the circus that were to be found in the one-ring shows of Europe and Russia and even farther back in history among the street entertainers and ancient saltimbanco, or street performers.\textsuperscript{27}

\begin{footnotesize}
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\item \textsuperscript{22} Ibid., 3.
\item \textsuperscript{23} Ibid., 3.
\item \textsuperscript{24} Ibid., 2.
\item \textsuperscript{25} Ibid., 127-128.
\item \textsuperscript{26} Joel Schechter, \textit{The Pickle Clowns: New American Circus Comedy}, (Carbondale: Southern Illinois University Press, 2001), 12.
\item \textsuperscript{27} Albrecht, 7.
\end{itemize}
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This new movement of the circus in North America, one that continues to look back to Europe and Russia as models, is the circus that I am concerned with in my study. The term ‘new circus’ has been applied to the recent movement of European traditional one-ring circuses that emphasize theatricality over spectacle, and aim to evoke a wide range of feelings with strong use of stage lighting and music. To clarify this statement the definitions of theatricality and spectacle will be useful.

Understood in its own terms, the spectacle proclaims the predominance of appearance and asserts that all human life, is mere appearance...

Theatricality on the other hand can be defined as “an artificial and mannered quality.” The difference between the two states being that theatricality is merely a staged quality, whereas spectacle is a mockery of human social condition. The ‘new circus’ then is not a mockery of a social condition, but merely a staged version of it, a place for life to occur as it will alongside it without being judged. A statement from Cirque Du Soleil might sum up the ‘new

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circus’ the best, “we don’t reject the history of the circus; we just select the aspects of it that interest us the most.”

For simplification and clarification, from this point on, my discussions using the term ‘circus’ will refer the traditional one-ring circus shows, both in North America and in Europe & Russia. If discussion is required in reference to other forms of circus that are not the main focus of this work, specific note will be included for clarification.

“...All circuses are a reflection of their times. That is why the circus as an institution has survived. It has always been willing to change with the times.” The one-ring circus today still employs the elements of the circus that have always thrilled youth: color, pace, music, and drama but they are employed in a far more refined way so as to bring out the youth in all of us. But what is most important is that the circuses embody a “set of traditions that foster intimacy, artistry, attention to skill, and a feeling of ensemble.” Cirque Du Soleil, the Pickle Family Circus, and the Big Apple Circus embrace these traditions in their performances. These concepts are reflected also in “new theatre, in hippie communes, and in political protest.” It should not be surprising then that many of the new circus troupes were borne out of activist groups using circus as their form of personal, political, or social expression. Because of these origins, the circuses all work to consider

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31 Albrecht, 96.
32 Ibid., 226.
33 Ibid., xi.
34 Albrecht, 7.
themselves a contributing member of the community and to make a school an essential part of their program, open to new ideas and new artists.

When one begins to look at where these circuses have gone in the past 30 years there becomes an issue of placing the circus in the realm of performing art as opposed to popular culture.

“There was always an issue as to whether a circus was theatre. Even today there are people who have difficulty accepting the circus as a stand-alone performing art. They will throw it into an all-purpose miscellaneous grouping or shoehorn it into the theater category.”

The history of the theatre is a very different history than that of the circus, but where is the line today between the two? Paul Binder of the Big Apple Circus states, “the circus...is the modern form of theatre that most closely resembles the original ritual forms out of which all other performing arts grow.” The word ‘theatre’ is defined by the American Heritage Dictionary of the English Language as “Dramatic literature or its performance.” What the theatre does that the circus does not do is to attempt to tell a story. Political or other underlying messages may be expressed through a theme as I will elaborate on briefly, but a storyline cannot be successfully incorporated. One can

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36 Ibid., 9.
37 Ibid., 11.
38 Ibid., 136.
39 Ibid., 45.
decidedly differentiate between legitimate drama and musical theatre, but in both cases the production has a story line of some sort. As well, one does not easily confuse theatre with dance performance; and dance performance does not necessarily tell a story, thus it is reinforced that it is not theatre. Within the realm of dance performance one can begin to differentiate between different styles, ballet versus modern dance versus Irish folk dance for example. The confusion with the new circus is that it draws from so many of the other performance arts, that its core has been confused. Thus, knowing the history of the circus as an exhibition of skill and daring, we can understand that a story line is not part of the situation.

Cirque Du Soleil is the most popularly recognized new circus troupe, but in reality their performance has different intentions in the representation of the new circus than many other troupes. Cirque Du Soleil may well have left the world of circus and moved into the realm of theatre plus dance; they declare,

"behind each perilous leap, there is a purpose, an intention, an individual, an emotion...In other words, there are no tricks as such. There are only situations that require certain actions which are performed by characters who think and feel."  

The attempt by Cirque Du Soleil to instill a storyline into their circuses is unique to this group, and considered a ridiculous approach by others in the circus community, according to Mr. Jando, a prominent figure in this

41 Albrecht, 76.
community. It is not the role of the circus to tell a story, but rather to evoke an emotion, perhaps through the use of a theme, but not a story.\textsuperscript{42} For clarification, the word ‘emotion’ is defined by the American Heritage Dictionary of the English Language as “a mental state that arise spontaneously rather than through conscious effort and is often accompanied by physiological changes,”\textsuperscript{43} and the word ‘theme’ is defined by the American Heritage Dictionary of the English Language as “a topic of discourse or discussion.”\textsuperscript{44} We can reasonably put these together to understand that a storyline is not a prerequisite for the evocation of an emotion, since an emotion is such a spontaneous occurrence. An emotion may occur at any time during the development or reinforcement of a theme, and will occur at different times for different people. Cirque Du Soleil’s creators “are theatre people creating circus, as opposed to [other new circuses which are] circus people trying to use the best of the theatre to create a circus”\textsuperscript{45} “The people in the circus have been looking to the theatre for the means to develop and showcase their skills and ideas more effectively.”\textsuperscript{46} Cirque Du Soleil is thus an example of an alternative form of the circus that which differs from the likes of the Pickle Family and Big Apple

\textsuperscript{42} Dominique Jando (Associate Artistic Director, Circus Center San Francisco), in discussion with the author, November 14, 2003.


\textsuperscript{45} Albrecht, 62.

\textsuperscript{46} Ibid., 240.
Circuses. If we reflect back for a minute to the discussions concerning the political origins of many of the circus troupes, with this new understanding of the use of theme rather than storyline, we can better grasp how it relates to hippie communes and political protests, where there is no storyline with a beginning, middle, and end, but rather an overall theme driving the efforts; such is the circus.
1.3 Interaction of the Senses

VISUAL, AURICULAR, TACTILE, PRESENTIMENTAL, IMPRESSIONAL

In this section I will elaborate on the term performance as specific to the interactions between people. I will look specifically at the interactions between performer and audience and among the members of the audience.

A performance is an interaction between performers and audience. Audiences vary greatly from one show to the next. They may be hard to please, slow to react, or appreciative and wildly enthusiastic. Since a performance is spontaneous and unpredictable, each show has its own character.47

To Judy Finelli of the Pickle Family Circus,

The point... was ‘to find a way for the audience to have an emotional connection to the performers. I wanted them to care about the performers beyond being impressed with their physical skills.’48

The concepts of focused and unfocused interaction have been presented earlier in this thesis. “Statistics show that communication between people results not only from an understood language, but depends to a much large extent on inflection, spacing, and bodily gestures.”49 But this is only the beginning, to deal with focused communication.

47 Machotka, 16.
48 Albrecht, 34.
Concentrating on the rediscovery of the roots of theatre, the power of performer presence, and the direct exchange between performer and audience, these artists perform for a community of individuals rather than for a single unified mass. 50

It is important when considering interactions between people to be specific as to whether the intent is for a one on one connection or for a general emotion to be conveyed to the mass, anyone who happens to be around. An example of focused interaction between the performer and each member of the audience might be drawn from a description of a Cirque Du Soleil performer by a member of the audience,

The delicate, careful way she nudged each hoop with her toe, as if it were an undergarment, drew t onto her ankle an then higher – it a was kind of understanding with every member of the audience. This was a gesture that women recognized from their most private, lonely moments, and men from theirs too. 51

In the circus the clown is the one character who makes a series of reoccurrences throughout the show. Thus, the clown is capable of character development, which most other performers are not.

In America, the clown developed into a silly character to be laughed at; in Europe the clown developed a more complex character with intelligence and wit...they show us a wide

50 Ibid., 23.
51 Liza Weiland, You Can Sleep While I Drive, (Dallas: Southern Methodist University press, 1999), 100.
range of human responses; we can easily laugh at their vulnerabilities as our own.\textsuperscript{52}

In the traditional circus there are two clowns, “the Auguste is frumpy, simple, and capable of outwitting the white clown by his innocence.”\textsuperscript{53} The circus I am discussing uses these traditional roles.

Circus clowns have never been famous for their conversation, at least not until now. In some circuses, such as Ringling Bros. and Barnum & Bailey, clowns are hardly ever heard. They enter a three-ringed arena and perform brief, wordless interludes, throw buckets of confetti, and chase one another until the tiger cage or the trapeze has been set up for the next act. The Pickle Clowns are different. They speak audibly from the center ring – their only ring - and they address the audience as well as one another.\textsuperscript{54}

The clowns offer a portal into our own ways of interacting with others, because they have so many traits that we all see in ourselves, just enlarged to comedic scale. Their ways of interacting are also exaggerations of how humans go about day-to-day life.

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\textsuperscript{52} Machotka, 37. \\
\textsuperscript{53} Machotka, 38. \\
\textsuperscript{54} Schechter, 4. 
\end{flushright}
1.4 Seeing and Being Seen

I would like to flesh out some of the points raised in the previous section here. Specifically the interactions between different members of the audience.

Hannah Arendt discusses people in the public realm and describes it as a form of appearance that presupposes the widest possible exposure, “appearance...constitutes reality.” In the public, there is always “the implacable, bright light of the constant presence of others.” The circus acts just as another venue for the display of one person to another. This is perhaps an unintentional, but yet unavoidable, occurrence in any public space including the circus. The aim of the circus’ public spaces should be to cause the least interference to normal social interactions, while at the same time exuding the feeling of intimacy inherent to the one-ring format.

Social divisions in society naturally are apt to occur in any culture. The kinds of arts attended by different members of that culture then will vary greatly. The history of the circus is one that has attendance from every level of the social hierarchy. To discuss street performers as an origin of the circus is to say that the circus is for everyone, of every social status, race, creed, etc. However, the circus of the 1700s in Europe and the Americas was an event attended by the who’s who of society. In turn, the

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56 Ibid., 68.
57 The one-ring format is described in detail in section 1.2, pages 12-14.
performers often attained a high level of recognition among the upper societal circles. However, over time, as the number of circuses increased the prestige declined, as did the cost of attendance. Thus the circus once again became an event for anyone who could afford the small fee, but at the same time the skill level of performers and quality of performance declined and the circus gained its reputation as a purveyor of freak shows and comic or crude sideshows.\textsuperscript{58}

Then came the birth of what would become the Ringling Bros. & Barnum & Bailey Circus. A circus flyer for the 1882 season (the 4\textsuperscript{th} season for Ringling) advertises the event as:

\begin{quote}
Ringling Bros. Classic and Comic Concert Co.
A refined and high-class entertainment,
containing many of the most prominent features
of the musical and comedy world...
Two hours of solid fun, an evening of melody,
mirth, and merriment.
Refined societal comedies.
Classical Orchestra.
Uniformed Military Band...
Popular prices of admission...
Grand free open-air concert and parade ever day
at noon, and every evening at seven o’clock.\textsuperscript{59}
\end{quote}

The American circus had again reached a level of some status, while ‘dog and pony’ shows toured the countryside entertaining the less affluent rural American population, keeping the circus alive in some form at all levels of society. Once again, as ‘the greatest show on earth’\textsuperscript{60} grew in popularity and scale the cost decreased to a level of affordability for the majority of the American population. It grows a reputation as a children’s attraction, until once

\textsuperscript{58} Durant, 14-25.
\textsuperscript{59} Ibid., 147.
\textsuperscript{60} The Ringling Bros. & Barnum & Bailey Circus
again the popularity diminished as it became tacky and unpalatable to the tastes of the adult population who had enjoyed the circus as children.\textsuperscript{61}

The next movement arrives with that of the ‘new circus’ and the demographics of the audience changes considerably. While ‘the greatest show on earth’ is still alive and active, its marketing is still directed at families with small children. The most profitable of the new circuses, Cirque Du Soleil’s marketing is directed primarily toward people that go to the theatre and secondly to those who go to the ballet. The female to male ratio of the audience is two to one, and children under age 14 make up only 3\% of the total audience. Two thirds of the audience is between the ages of 25-45, 85\% are college educated, and over 50\% earn over $50,000/year.\textsuperscript{62} The top price (not including VIP prices) for a Cirque Du Soleil show in New York City goes for $95.

The [Ringling Bros. & Barnum & Bailey Circus] has reacted to what it has learned about its audiences needs by adjusting the performance times and pricing the tickets to ‘a good sense of what the market will bear.’ The top tickets in Lincoln Center [in New York City] go for $45, and are always the first ‘to fly out of the box office.’\textsuperscript{63}

The circus in America today has again reached a level of status, at least requiring that the patrons be of reasonable financial means. This new demographic requires a certain

\textsuperscript{61} Albrecht, 11.
\textsuperscript{62} Ibid., 149.
\textsuperscript{63} Ibid., 141.
level of quality of materials and design in the spaces they are paying to attend a show in. While the family attending a Ringling Bros. & Barnum & Bailey Circus show will mingle pre-show in the concourses surrounding the arena amidst loud salesmen hawking their souvenirs, hotdogs, and cotton candy; the patron of the Cirque Du Soleil show for example will more likely talk quietly with their party while browsing the selection of embroidered leather jackets and DVDs and sipping wines and other beverages, and expect the same of their fellow circus goers.

At the other end of the spectrum, most new circuses’ community outreach programs put on free shows in an attempt to make this art, which once again has a level of status attached to it, available to everyone. These shows are however scaled back versions of the original, still emphasizing the fact that this is an art of prestige, with the underlying tones that it is not actually for everyone anymore.

In Europe and Russia however, the circus did not go through the drastic cycles it has in the United States, and while there is always a level of popular culture that is attached to the institution, the circus has held a much more consistent respect there. The Soviet circus is a perfect example. In 1919 Lenin made a declaration to name the Soviet circus a national treasure worthy of preservation. The professional circus community took it upon themselves that our primary task must be to wrest the circus away from the opportunists who play to the bitter tastes of the public...once it is free of this influence, it will certainly become what it
must be: an academy of physical beauty and merriment\textsuperscript{64}

This was met with the respect and enthusiasm of the government [before the fall of the Soviet Union in 1990], and to this day

The soviet government has not only built the only formal circus school in the world, but it has also given its circus artists both income and social status as great as that of other performers, ballet dancers, or concept artists, and greater than any other citizens excepting top scientists and high government officials.\textsuperscript{65}

In the 1970s the Parisian circus

acquired a high level of social and artistic acceptability among the artistic and literary communities of Paris and even among members of the social elite...it was now being evaluated as an art form in itself to the extant that...it could be compared favorably with theatre.\textsuperscript{66}

The cost of attending the circus in Europe or Russia is approximately half that of attending an equal show in the United Stats or Canada. But Mr. Jando, a French native now living in the United States, reminds us that one must keep in mind that the cost of attending any cultural event in Europe or Russia is approximately half that of an equal event in the United States or Canada.\textsuperscript{67} While the state in Russia and France support the circus, here in the United

\textsuperscript{64} Ibid., 8.
\textsuperscript{65} Leon Harris, \textit{The Moscow Circus School}, (New York: Antheneum, 1970), 5.
\textsuperscript{66} Albrecht, 6.
\textsuperscript{67} Jando, in discussion with the author, November 14, 2003.
States it emerges as a figure of speech, the search for freedom of expression, disenchantment with the state, and post Vietnam War anti-government culture.

"What makes [any] subject [or performance] fit for the higher curriculum [or social class] is surely no novelty: it is that it shall enlighten all the corners of the mind and teach its own uses." Is it possible then that the circus has reached a level in the United States comparable to what it is in Europe and Russia? If so, then what uses does the new circus teach? The time period that the North American ‘new circuses’ grew out of was that of the activism of 1970s counterculture. Albrecht declares, "it seems doubtful that the New American Circus could have grown out of any other period of our history." This comment must no doubt refer to the tendency of culture since the 1970s to become more closed and conservative, or at the very least apathetic. Larry Pisoni, founder of the Pickle Family Circus, when asked if his troupe conveyed a political statement replied, "I should hope so. All art is political." What this original political statement of the Pickle Family Circus was seems to have been lost along the way however, since when questioned about it, Dominique Jando, Circus Center’s current Associate Artistic Director, denied that there was ever a political statement carried by the troupe. Interestingly enough, for some troupes, to use Cirque Du Soleil as an example, "now that the circus’s artistic merit
has been given official recognition, it is – somewhat ironically – returning to its original, or social, message to encourage increased [financial] contributions [to the predominantly non-profit troupes].” \(^{72}\) Is this simply a factor of America settling into an era of complacency, or has the circus become an institution in society that is considered complacent, where artists desiring a new expression of their ideals have found another artistic outlet? However, when one looks at the demographics of the audiences of the circuses, being more affluent members of society and fewer children, we should remember, the hippies of the 1970s counterculture were children of affluent families. \(^{73}\) Perhaps the circus is still following a cyclical pattern, with another renaissance still to come in a generation or so.

What is more important however to look at are the expectations of each social group when they attend a circus. The ways different social groups interact amongst themselves is the issue at hand. Perhaps even the circus company will react to their target audience when they formulate the theme of the show, which in turn may affect the architecture of the place.

\(^{72}\) Albrecht, 139.
\(^{73}\) Ibid., 11.
1.5 Architectural Assemblage of the Circus

In this section I will assemble various bits of knowledge that I have gleaned through the process of writing this work as specifically related to the design of a circus building with regard to interpersonal interactions.

The architecture of the circus immediately brings in the 13-meter diameter ring with surrounding arena seating. But the influence that this form has had on the interactions between people is more complex than one might first imagine.

The audience...tends to be far more supportive of a performer’s honest efforts when they are as close as they are in a one-ring circus. From there they can see the sweat, the strain, and the tension. They can also look directly into the windows of every performer’s soul, the eyes.74

[Peggy] Snider recalls that for her,

‘creating a community was a visual thing. When we worked in Central Park [of New York City], as the Pickle Family Jugglers we played to a huge, mixed audience, and they formed themselves into an absolute circle that required they look at each other. These were people who would not have felt good about walking down the same sidewalk together, and yet they felt safe and comfortable watching us [as a single unit]...So that’s what I was trying to re-create in [the Pickle Family Circus outdoor performance arena] – a feeling of openness and security.’75

In the Pickle Family Circus arena,

74 Ibid., 51.
75 Ibid., 23-34.
...children were encouraged to sit on the grass as close to the ring as they could get, thus leaving their adult chaperones to fend for themselves. In that way both children and adults were free to respond in their own way without worrying about whether their responses were appropriate to the other's expectations.\textsuperscript{76}

In this way the architecture facilitates intended performer and audience interactions.

In another example, as part of the show for Circus Flora, out of St. Louis,

Before the performance even begins, one or more of the clowns leads an inquisitive white goat through the audience. Should the animal find someone eating popcorn he tends to insist on getting his share. Otherwise he seems a docile beast, and the audience loves having to dodge out of his way. When Larry Pisoni appears as a guest artist on the show one of his comic turns involves an unsuspecting friend he extracts from the audience. Pisoni seems to have an instinct for picking just the right person and his work with them is never threatening of humbling. As with the Pickle Family Circus, the audience feels very much a part of what is going on. It is a part of the family.\textsuperscript{77}

In this case the performance tent must be designed to easily allow this mingling of performance space with audience space.

Because technical requirement for the design of the ring do not leave much to the imagination as far as layout in plan and section (the ring must be in the center of a 3/4 arc

\textsuperscript{76} Ibid., 32.
\textsuperscript{77} Ibid., 110.
of seating providing nearly equal viewing distances to all patrons and equally desirable sightlines with seats rising along an arc away from the ring to assist in providing equal sightlines), many of these design implications related to user interaction will occur outside the grand chapiteau.

The lobby is an important space to consider in light of this thesis.

Successful lobby spaces invite people to socialize and create a sense of arrival and anticipation. Generously proportioned spaces, ceremonial staircases, and careful architectural detailing are examples of the elements that can be combined to create the appropriate atmosphere. The lobbies of the facility must be sized to allow comfortable circulation and milling space for all patrons. Lobbies will have a number of patron amenities immediately accessible. Restrooms, donor’s lounges, public phones, drinking fountains, concessions, and merchandising should be provided and located within easy access.78

These elements of the lobby each bring to the table different relationships that users will employ to their advantage when using the space. In addition,

...the physical distance over which one person can experience another with the naked senses – thereby finding that the other is ‘within range’ – varies according to many factors: the sense medium involved, the presence of obstructions, even the temperature of the air.79

For example, a ceremonial staircase will be walked upon gracefully by women hoping to show off their evening gown and figure beneath. A merchandising area is certainly a location for evaluation of their material self-presentations and relationships to one another based in part on their choices of purchases. Even the paths users will walk from door to their seat can be viewed in light of evaluation, as different cost level of seats will have different entrances to the grand chapiteau. But again, all of these actions will be perceived differently from different distances and vantage points.

In light of all the variables available in the study of interpersonal relations in regard to the circus, a number of volumes could be written. Instead, the major emphasis on interaction between performer and audience may be summarized as such,

In the late 1920s the revolutionary French director and teacher Jacques Copeau wrote that the circus ring was an ideal modern theater. Its resemblance to the best theatres of the past was not lost on him. He saw the open and expectant circus ring was much like a Greek theatre, the wooden ‘O’ of Shakespeare’s time, or a town square with a commedia platform. In the arena décor was of little importance and the actor, who was brought into close interaction with the audience surrounding the playing space on almost every side, was everything.80

It is not my intent to accept the social hierarchies presented here, or to reinforce them with the architecture of the place. I intend instead to reinforce how historically this

80 Leabhart, 1.
has occurred, and present the circular arena as the antithesis to this. The design of a circus theatre has the potential to address these potentials. The singular point of entry to the arena being a symbol of equality, the circular seating pattern another, and all other aspects as related to the circle being symbolic of equality in three dimensions.
Chapter Two

My aim in this chapter is to explore how the client determines the kind of space that is appropriate for the ‘new circus.’

2.1 Client Identification

The client is Circus Center, a corporation based in San Francisco, California. It consists of a professional performing company, a student performing troupe, and a school with programs and classes at all levels in acrobatics, flying trapeze, hand-balancing, contortion, juggling, teeterboard, wire-walking, clowning, and anything in the air, upside down, backwards and seemingly impossible.\(^7^8\)

The client is currently operating out of a space that is significantly undersized for its current needs and will be desperately inadequate for its future needs. Circus Center offers a number of recreational, pre-professional, and professional classes as well as community outreach efforts, a yearlong circus clown-training program, and a summer circus camp. In 2004 Circus Center will begin a two-year training curriculum for students who aspire to become professional performers. Circus Center will be renting a tent for performances in the next few seasons, but desires to have a permanent circus building with a performance space.

The largest portion of income of many circuses comes from

\(^7^8\) Circus Center San Francisco, “Welcome! (homepage),” http://www.circuscenter.org/index2.html.
the sale of souvenirs and concessions, which Circus Center cannot currently benefit from because they do not have their own tent or building. Therefore, the move to a building would have positive financial impact down the line from that aspect. While there is no permanent store in the proposed program, kiosks in the foyer would enable sales during performances of other concessions and souvenirs.

2.2 Circus Center Background and Philosophy

Asked how the Pickle Family Circus [what is now the New Pickle Circus] acquired its name, Larry Pisoni recalls that his group of jugglers, composed of Peggy Snider, Cecil MacKinnon, and himself performed without a name until a New York television producer asked who they were. Pisoni looked at his female partners and replied: ‘We’re defiantly not Pickle Brothers.’ This denial was followed by a decision that they were the Pickle Family Jugglers and later led them to the name Pickle Family Circus.79

The Pickle Family Circus opened in San Francisco in May of 1975. In 1993 they restructured under bankruptcy protection as the New Pickle Circus.80

The San Francisco School of the Circus Arts was founded by Wendy Parkman and Judy Finelli as a project of the Pickle Family Circus in 1984. Sixteen children made up the first roster. The students trained at the Pickle’s headquarters in an old church on San Francisco’s Portrero Hill. In 1991 Judy Finelli hired master trainer Lu Yi, former star performer and artistic director of the Nanjing Acrobatic Troupe, to train Pickle performers and to develop the most comprehensive Chinese acrobatics program outside of China. That goal was soon met with the arrival of

79 Schechter, 9.
80 Ibid., 3.
two of Lu Yi’s protégés from Nanjing. Later, other colleagues and former students of Lu Yi who had likewise flourished as performers came to teach at the school. [They] established as a separate non-profit corporation in 1993.81

The school made its home in the O’Connell High School gymnasium, a free standing gymnasium building at 755 Frederick Street between Arguello and Lincoln Streets across the street and south from Kezar Stadium in the Haight-Ashbury district. This is the building that is still used by Circus Center today.

To give students performing opportunities, Lu Yi established the San Francisco Circus in 1996. The following December, the school staged its first production, Zoppo!, a show that played to a sold-out house at the Cowell Theater at Fort Mason.82

The San Francisco Circus is now known as the San Francisco Youth Circus.

In July 2000 the school purchased the New Pickle Circus from the Santa Cruz-based non-profit organization that had produced the company’s shows since 1993. One hundred percent of the purchase price was raised from contributed sources. Now the organizations professional productions are staged under the banner of the New Pickle Circus...Lu Yi...became its artistic director...Typically, shows are produced at the Cowell Theater in San Francisco during the holiday season, then, in January, tour regional performing arts centers in Mountain View, Rohnert Park, and Walnut Creek. Student productions are

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81 “Circus Center Winter Schedule 2002” (flyer, Circus Center, 2002), 2.
82 Ibid., 2.
mounted by the San Francisco Circus, which in summer 2002, ... [toured] indoor performing venues throughout California.83

In 2000 the school initiated the country’s only professional clown training program, the Clown Conservatory, which is partially funded by the National Endowment for the Arts.84 “Reflecting the fact that the organization now encompasses more than a school, the board of directors changed the corporation’s name to Circus Center in 2001.”85 Further evidence of the changes happening at Circus Center are documented in its Winter 2001 issue, SPECTACLE – A Quarterly Journal of the Circus Arts, wrote of the organization: ‘Circus Center has recently completed several major moves that promise to propel it into the foreground as America’s premiere training center for the arts of the circus.’86

In another such move, Dominique Jando, an internationally respected circus and popular entertainment historian, former clown with the Cirque Mendrano in Paris, founder of Paris’ Festival Mondial du Cirque de Demain, and longtime Associate Artistic Director of the Big Apple Circus in New York City, was appointed Associate Artistic Director of Circus Center and Director of the School in October 2002.87 “In

83 Ibid., 2.
85 “Circus Center Winter Schedule 2002,” 2.
87 Circus Center San Francisco, “Media” Press Releases: Dominique Jando Joins Circus Center As Associate Artistic Director, http://www.circuscenter.org/media/pr09_18_02.html.
2004 the School launches a two-year training curriculum for students who aspire to become professional performers.\(^{88}\)

“The mission of Circus Center is to inspire passion for Circus through training and performance.”\(^{89}\) Circus Center also believes that circus is a powerful means to build community...Circus Center offers its community several programs designed to give as many people as possible opportunities to experience the magic of circus...[Circus Center’s] at-risk youth program, funded by local foundations, teaches circus skills to young people from throughout the city to help them develop self-confidence, self-esteem, teamwork skills and trust in others. Aviatrix, [Circus Center’s] program for women who have experienced violence, provides training in basic circus skills and clowning to help the participants in their recovery process. Clown Conservatory students perform in nursing homes, hospital pediatric care units and adult day-case centers. Performers from New Pickle Circus and the San Francisco Youth Circus regularly stage free shows for community festivals, neighborhood fairs, and civic celebrations...This year well over 100,000 people will benefit from these community programs that are the cornerstone of Circus Center’s community outreach.\(^{90}\)

### 2.3 Description of Client’s Operations

Circus Center is currently comprised of two major components: a circus school program and a professional circus company.

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89 “Circus Center Winter Schedule 2002,” 2.
The school offers training for adults and children in recreational, pre-professional, and professional circus arts.\textsuperscript{91}

The class brochure advertises:

Beginner classes focus on learning basic skills and are open to all. While appropriate for students with no acrobatic experience, classes also benefit more advanced students by helping them refine techniques that comprise the basic grammar of acrobatics. Classes begin with preparatory warm-up exercises. For intermediate/advanced classes, students are expected to warm-up on their own before class. To ensure safety, warm-up is mandatory. An instructor’s evaluation is required prior to admission to intermediate/advanced classes.\textsuperscript{92}

Circus Center currently has a faculty of twenty-four and is operated by a nine-member board of directors. The School has approximately 400 year round students in classes with an additional 350 during the annual summer circus camp.\textsuperscript{93} While funded predominantly by class tuitions and performances, approximately 35% of the School’s budget is from contributed sources.\textsuperscript{94}

Classes currently offered for children include:

- Preschool Acrobatics Classes (Tumblebees, Gympanzees, and Acro-Bats)
- Chinese Acrobatics
- Circus Arts
- Children’s Static Trapeze
- Aerial Dance & Performance
- Clowning for Kids

\textsuperscript{91} Circus Center San Francisco, “Classes/Programs,” Overview, http://www.circuscenter.org/classes/classes_overview.html.
\textsuperscript{92} “Circus Center Winter Schedule 2002,” 2.
Classes currently offered for adults include:

- Chinese Acrobatics
- Contortion
- Doubles
- Aerial Conditioning
- Static Trapeze
- Intermediate/Advanced Static Trapeze & Choreography
- Swinging Trapeze
- Spanish Web
- Rope
- Aerial Contortion
- Flying Trapeze
- Chinese Pole
- Circus 101
- Juggling
- Object Manipulation & Equilibristics
- Teeterboard
- Trampoline
- Foot Juggling & Risley
- Open Juggling Night
- Splits & Backbends
- Extreme Stretching I & II
- Theater for Clowns
- Movement, Rhythm & Choreography

Workshops currently offered include:

- Object Manipulation/Puppetry
- Mime
- Trampoline: Cross Training for Inverted Flight
- Stretching: Getting the Results You Want\(^95\)

“The Clown Conservatory...is the only year-long circus clown training program in the United States. To date, 23 people have graduated from the program...the students...participate in monthly in-house performances, community performances and the annual Circus Center June Showcase.”\(^96\)
Groups and parties are also invited. "Circus Center is a great place to celebrate your special occasion or hold your corporate event."\footnote{97} To summarize their performance schedule, Circus Center advertises:

Circus Center produces a wide variety of public performances. Its professional company, the New Pickle Circus, stages annual holiday shows in December...then tours them to Bay Area performing arts centers during the month of January. The San Francisco Youth Circus performs throughout the year. To showcase student skills and develop students performing skills the Circus Center school develops one or two fundraiser shows each year. In addition to these public performances Circus Center staff can tailor-make a circus performance for private [parties] or corporate event[s].\footnote{98}

\section*{2.4 Client Goals}

As Circus Center continues to make moves towards establishing the School as a distinguished professional school of circus arts, the only one in the United States, and one of only two in North America, Creative Director Dominique Jando is looking to move into a space that will fulfill not only the spatial requirements of a recreational and professional school, but also become their own performance space. The performance space should be one that is outfitted for the circus needs, but that can easily be adapted for a circus festival or any other guest-performing troupe including arts with very different needs such as the ballet.

This building typology differs from permanent theatres constructed by Cirque du Soleil in that their buildings cannot be used by any other company without major retrofitting. The building typology that Mr. Jando is indicating is one that is not existent in the United States today, but that has a long history in Russia and throughout Europe. There are over 17 circus buildings in Russia and over 50 throughout Europe. These are not tents and not theatres. This is an entirely distinct building type.

The spatial and technical requirements are elaborate and gone into detail in the building program, but the major concepts can be distilled into a few concepts: The building is for the one ring circus. While there may be multiple rings for training, there is only one performance ring which must have enough space to perform yet still convey emotion to an on looking audience. The professional and recreational students must be kept apart, preferably in separate buildings. Professional students are training 6 hours a day, 6 days a week for a career and must not be interrupted by recreational students of any age. All spaces must have ample height to rig aerial apparatus. Although Circus Center does not work with animals, the building should be designed such that the only adaptation necessary to involve animals is the addition of a stable complex.99

The major goal, design criteria aside, is to design a space that is on par with the leading circus schools of the world and that enables the training and performance of

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professional students and recreational students alike in a space deserving of their talents.
Chapter Three

3.1 Program Precedents

3.1.1 The Moscow Circus School

Moscow, Russia

architect: unknown

1971

The Moscow Circus School can be accredited with developing the first formal circus school in 1927 in old abandoned circus wagons in Moscow. After a time they moved into an old stable and were able to work out of a practice ring in that space, and later, with government funding, moved into a building with two practice rings as their attendance increased. In 1971 with more funding from the government, the Moscow Circus School was given a new building with three practice rings, 400 dormitory rooms, and dozens of classrooms.¹⁰⁰

The new Moscow Circus building is based on years of circus training in a country where circus artists have been given “both income and social status as great as that of other performers, ballet dancers or concept artist, and greater than any other citizens excepting top scientists and high government officials.”¹⁰¹ The building is the only circus school in the world funded by a national government, as is a masterful work of programming, as it trains some of the best circus performers in the world.

¹⁰⁰ Harris, 3-4.
¹⁰¹ Ibid., 5.
“Operating on the theory that quality is better than quantity, the Moscow Circus has only one [performance] ring instead of three.”102 The performance space is the most elaborate I have discovered in my research thus far. The performance ring, a standard 13-meter diameter ring in dimension, is actually a void with a floor lift below. Below the performance area are five variations of the ring that can be slid into the center location and raised into place as the performance ring of choice. The rings available are the equestrienne ring, a swimming pool, an ice rink, a two level wooden magician’s stage, and an under lit glass ring. In addition to the elaborate ring lift system the performance space also has a double ceiling above the ring. The space between the lower and upper ceilings contains a catwalk system to access trap doors in the lower ceiling that enable performers to make entrances from the ceiling undetected. The height of the lower ceiling at the cupola is 20-meters, the standard established in Russia, but used internationally.103

To support the performance ring, the backstage space is also complete in attention to circus needs. The backstage space has a second full size (13-meter) ring for warm-up that is connected to the performance ring by a short hallway. This layout enables horses to be prepped and brought to a full speed gallop backstage, then directed through the short connecting hallway, and into the performance ring already at full speed. (The 13-meter

102 Ibid., 6.
diameter standard for rings was developed historically because this is the dimension needed for a horse to run at a full gallop.) The full size ring backstage also allows ample space for other performers to warm up before their acts. Surrounding the backstage ring are three levels of dressing rooms which open to open hallways overlooking the ring. This design creates a constant connection between the performers and the ring, an association that is inherent to the circus.

\(^{104}\) Ibid.
3.1.2 Ecole Nationale de Cirque

Montreal, Quebec, Canada

architect: Robert Magne, Lapoint-Magne Architects, Montreal

2003

The National Circus School has just this autumn located into its new “world-class facilities in the heart of the Cite des arts du cirque in Montreal.” The School “offers a 3-year full-time professional program leading to a diploma of collegial studies in circus arts.” The school trains not only the specific circus arts, but also trains in dance, mime, acting, music, and art. Many students from the School find jobs with Cirque du Soleil after graduation, as Guy Caron has been instrumental in both organizations.

The program spaces of the School have been well documented and include: a weight room, sauna, cafeteria, dance studio, classrooms, circus library, administration spaces, and two main rooms, the performance chapiteau

105 “Cirque du Soleil: Alegria” (North American Tour official program, Canada: Cirque du Soleil, 2003), 47.
106 “Cirque Du Soleil: Alegria”, 47.
107 Albrecht, 162.
and the gymnasium. The chapiteau has an observation gallery that extends three-quarters of the way around the ring and which connects directly then to the dance studio and administration spaces. The gymnasium is used solely for training and has a cushioned floor and 3 1/2’ deep crash pit for training aerial tricks. ¹⁰⁸
3.2 Building Precedents

3.2.1 British Museum

London, United Kingdom

Architect: Sir Norman Foster, Foster and Partners Architects, London

2000

This precedent relates to this thesis in its character as an addition/renovation to an existing, well known, neoclassical structure. While this precedent incorporates work on the exterior, I think that the contrast of materials and technologies is an interesting thing to look at.

The glass 'roof' is an addition to the existing Neoclassical (Green Revival) British Museum designed in 1823 by Robert Smirke. Sir Charles Barry produced a scheme in 1852, shortly after the museum was completed, to cover the inner courtyard with a glass roof, however, a Reading Room was instead constructed in the center of the courtyard space.\(^\text{109}\)

"The "Great Court" is in the throes of the most exciting expansion and restoration project [of the millennium projects], the highlight being Sir Norman Fosters "roof" of glass, stretching outward and around the central "Reading Room, which will create the largest covered plaza in Europe, recovering what has until now been one of the great lost public spaces of London...The Great Court will increase public space at the museum by fifty percent, and will house an education center, exhibition galleries, a restaurant, café and Museum shops. The Reading Room will be open to the public for the first time, a departure from the previous

'ticket holders only’ policy, complemented by an innovative multimedia collections database."\textsuperscript{110}

\textsuperscript{110} Ibid.
3.2.2 New Penn Station in the Farley Post Office Building

New York City, New York, United States

architect: Skidmore, Owings, Merrill, Chicago

2004

The renovation of the old Farley Post Office Building into Penn Station is relevant to this thesis in that its character is an addition/renovation to an existing, well known, neoclassical structure. While this precedent incorporates work on the exterior, I think that the contrast of materials and technologies is an interesting thing to look at.

“The renovation....will include relocating some post office services to other sections of the Farley building. The centerpiece of the project will be the glazed ticketing hall that will extend both vertically and horizontally beyond the existing Farley building.”\textsuperscript{111}

\textsuperscript{111} American Society of Civil Engineers, “Penn Station Redevelopment Moves Above Ground,” (New York: American Society of Civil Engineers, July1999).
Chapter Four

4.1 Project Goals and Design Issues

The design of a circus building to accompany the written thesis document will provide an opportunity to explore the concepts dealt with in the text in real spatial terms. The thesis text can be distilled in its most basic terms into being an exploration of the interactions between different user groups within the setting of the ‘new circus.’ The primary interaction that I am concerned with is that between the performer and the audience, which is an interaction that occurs at many more levels than merely the visual interaction. While some spatial requirements for the one ring circus are very rigid and defined, others are open to change as the needs of the company deem appropriate, and others desire to be able to change over time as the company evolves. It is in terms of these opportunities that I will be designing a circus building for Circus Center.

The design of the circus building will be primarily concerned with the users of the different spaces. It will be programmed to accommodate those who use the spaces at different times of the day and performance days versus practice days. Overlaying all of this user data will help me in determining levels of transparency between spaces and routes of circulation, in determining places to see and places to be seen but perhaps not see. In addition to the visual, other senses, including the auricular, tactile, and impressional will be considered in much the same way resulting in a complex layering system that becomes a strict
guide for the experience of users of the building. I intend to focus much of my time on the design of the actual performance space and the circulation spaces relating directly to that space, such as the lobby.

Lobbies and foyers mediate between the outdoors and the performance space itself and so serve an important role in preparing the patron for the performance experience. Successful lobby spaces invite people to socialize and create a sense of arrival and anticipation. Generously proportioned spaces, ceremonial staircases, and careful architectural detailing are examples of elements that can be combined to create the appropriate atmosphere.112

I feel that these spaces, much more so than training and back of house spaces, will provide me with unique opportunities to explore the thesis concepts in design practice and in theory.

Due to the historic nature of the existing structures on my site I am faced with another design issue, which must of course be tied back to my thesis ideas. As this thesis will fulfill both my Bachelor of Science in Interior Design as well as my Master of Architecture degrees, I will be designing primarily an interior renovation to the existing building as well as exploring the thesis ideas as they reach into the surrounding landscape of the site. I am thus presented with the issue of designing to stylistically match the existing versus designing with respect to, but not imitation of the existing. I will take the approach of designing with respect for the existing, but with no intention

of modeling the addition after the design or design intentions of the original building.

With these basic and underlying design approaches in mind, the following document defines the needs and requirements of a circus building for the client, Circus Center, as appropriate to the site, the Palace of Fine Arts building in San Francisco, California.
4.2 The Site

4.2.1 General Description and History

The Palace of Fine Arts building in San Francisco, California sits just off Marina Boulevard, Crissy Field, and the San Francisco Bay. Built for the 1915 Panama-Pacific International Exposition the building was rebuilt beginning in 1964 and is currently being occupied by the Exploratorium and the Palace of Fine Arts Theater. The space I will be concerned with will be the space currently occupied by the Exploratorium, located at 3601 Lyon Street (see context maps in appendix).

[The architect, Bernard Maybeck] chose as his theme a Roman ruin, mutilated and overgrown, in the mood of a Piranesi engraving. But this ruin was not to exist solely for itself to show ‘the mortality of grandeur and the vanity of human wishes...’ Although it was meant to give delight by its exterior beauty, its purpose was also to offer all visitors a stimulating experience within its doors...Maybeck visualized its colonnade...
streaming with people, finding a reward within the great doors.\textsuperscript{113}

What a better use for a former Fine Arts gallery than a theatre for a renaissance of performance art in America, an art form that is strongly European in history but that is becoming American in its own right, much like the design of the Palace did in its day.

Built for the 1915 Panama Pacific International Exposition in San Francisco, California, the Place of Fine Arts is considered by many to have been "the exposition’s most acclaimed building."\textsuperscript{114} At the time,

...as chairman of the architectural commission [for the exposition], [Willis] Polk had been given the assignment to design the Palace of Fine Arts, which stood at one end of the primary axis. As Polk was busy with his other duties, he held an in-house competition in order to make a preliminary design deadline. [Bernard] Maybeck made a quick charcoal sketch of a Roman ruin that met with immediate acclaim and won him the role as architect of the building. Maybeck chose the forms of ruined antiquity for his palace, but he freely mixed different periods and styles of classical architecture...Maybeck did not sketch a building as much as an emotion. As Maybeck explained in a pamphlet issued at the exposition, the proper attitude with which one should view art was 'that of sadness modified by the feeling that beauty has a soothing influence...to make a Fine Arts composition that will fit this modified melancholy, we must use these forms in

\begin{footnotesize}
\begin{enumerate}
\item[\textsuperscript{113}] \textit{Palace of Fine Arts: a brief history}, (San Francisco: San Francisco Exploratorium, 2001), 1.
\item[\textsuperscript{114}] Jeff Tilman, “Panama-Pacific International Exposition, San Francisco (1915),” (working paper, Assistant Professor of Architecture, School of Architecture and Interior Design, College of Design, Architecture, Art, and Planning, University of Cincinnati, Cincinnati, 2003), 2.
\end{enumerate}
\end{footnotesize}
architecture and gardening that will affect the emotions in such a way as to produce this modified sadness.’ For Maybeck, Roman ruins, French picturesque parks, and the engravings of Piranesi all evoked the desired emotion.\textsuperscript{115}

While all other building constructed for the exposition were demolished after the close of the exposition, the Palace survived, though it has always proven to be a burden on the City of San Francisco for lack of an appropriate permanent tenant. It went through a series of uses before being deemed unsafe for public use. Because of Maybeck’s initial intentions for the building, it was at one time attempted to preserve the Palace in its deteriorated state, but this proved futile. The material used for construction had not been intended to last more that two years. “Its columns and rotunda were framed in wood, and covered with ‘staff,’ a mixture of plaster and burlap-type fiber. It was the largest building ever to be made of that material...durability was one quality it lacked.”\textsuperscript{116} The main building “was simply a decorated shed of steel three-hinged arches lashed together inside of hollow tile walls and fitted out with frame partitions and numerous skylights.”\textsuperscript{117} When it was at last decided to reconstruct the Palace in concrete, the cost was prohibitively high and prevented the complete restoration. The scaled back plans for restoration leave out all façade detailing on the main building, and this remains the case today.

\textsuperscript{115} Ibid., 2.
\textsuperscript{117} Ibid., 2.
The Palace of Fine Arts Theatre and the Exploratorium have been the only two tenants to the space since the reconstruction, and minor improvements to the space have been undertaken during that time. While it has not been officially stated, it is common knowledge that the Exploratorium will be vacating their space in the next couple of years, and the Palace of Fine Arts will be looking for tenant proposals at that time. A complete timeline of the site follows:

- **1873-1913:** The site is owned by Rudolph Herman, proprietor of Herman’s Harbor View Bath, which “had entertained San Franciscans with hot salt baths, music, and picnic grounds in a small park. The adjoining lagoon became the reflecting frame for the Palace.”

- **1913:** The Palace of Fine Arts building commission for the 1915 Panama-Pacific International Exposition is given to the architect Bernard R. Maybeck.

- **1914:** The Palace is constructed by contractor J.D. Hannah for a total cost of $621,929. It encloses 148,558 square feet.

- **02.20.15:** The Exposition opens and the Palace is generally accepted as its finest building.


- **1916:** The Palace is kept as an art museum after the Exposition closes. A ball is held to finance operation of the building throughout the coming year.

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118 Ibid., 10.
• 1917: The United States enters World War I and interest in domestic improvements, such as maintenance of the Palace, wanes.
• 1930s: Deterioration of the Palace is corrected at a cost of $500,000. Repairs include replacing original wood footings and woodpile caps with concrete grade beams, correcting areas of settlement. Artists are commissioned under the WPA program to replace the decayed paintings in the Rotunda ceiling.\textsuperscript{119}
• 1934-41: Ten lighted tennis courts were installed for public use by the Recreation and Park Department.
• 1942-47: The Army used The Main Building as motor pool storage for trucks and jeeps during World War II.
• 1948: The Main Building is declared unsafe for public use and becomes a Recreation and Park Department warehouse.
• 1950s: The space is used variously as a telephone book distribution center, flag and tent storage depot, and temporary headquarters of the Fire Department Engine Company No. 20 and Truck Company No. 6.\textsuperscript{120}
• 1951: Bernard Maybeck is awarded the gold medal of the AIA (American Institute of Architects). Public interest in the Palace is revived.
• 1953: The California State Legislature receives a bill for restoration of the Palace from Representation Casper Weinberger
• 1957: California appropriates $2,000,000 for restoration of the Palace on the condition that San Francisco provides an equal amount.
• 1959: A bond issue is passed which provides $1,800,000 for the Palace. Financier Walter Johnson contributes an additional $2,000,000.
• 1962: A plan for restoration of the Palace in concrete is approved by the San Francisco

\textsuperscript{120} Newhall, 1-104.
Board of Supervisors. Hans U. Gerson becomes the head architect for the reconstruction.

- **1964-67:** Reconstruction is started, including many major structural and architectural renovations. Contractor for the reconstruction is B.F. Modglin. (a list of specific repairs can be found in the Historic Structures Report).
- **09.30.67:** Reconstruction is completed.
- **1969:** The Exploratorium science museum opens in the Main building.

*Image 21: The interior of the main building, as remodeled by the Exploratorium.*

- **1970:** The Theater for the Performing Arts is constructed in the Main building.
- **1979:** New exposed steel mezzanine constructed in Exploratorium held at least 25 feet from existing shell, leaving existing construction unaltered.
- **1981:** Little theater constructed in Exploratorium
- **1984:** Replacement of all original (1915) concrete roof slabs at Main Building with metal decking and insulation for a total cost of $2,000,000.
- **1986:** Improvements to the Exploratorium include new exterior doors and new portals.
- **1989:** Loma Prieta earthquake causes slight damage to the structures.
- **1993:** Earthquake damage repairs and seismic strengthening project undertaken. Architect is the Bureau of Architecture, San Francisco Department of Public Works.
4.2.2 Geographical Setting

[San Francisco's] disparate geography, architecture, people, and ideas defy an orderly blueprint yet somehow manage to coexist in harmony. Certainly the city’s location is one of the loveliest anywhere. Varying in elevation from sea level to 933 feet, it rests on some 40 hills at the northern end of a narrow peninsula, bounded on one side by the Pacific Ocean and on the other by San Francisco Bay. The nearly landlocked bay is connected to the ocean by a narrow strait. A pair of notable bridges arch over the bay's waters. While more than 280,000 vehicles a day cross the San Francisco-Oakland Bay Bridge, the Golden Gate Bridge has become a symbol of San Francisco, even more so than cable cars or Victorian houses. Completed in 4 years, its single-suspension span is anchored by 746-foot-high twin towers – the world’s tallest...its 220-foot clearance allows even the tallest vessels to pass underneath.

The greater San Francisco Bay Area is home to more than 6 million people...The city is the financial and administrative heart of the West, one of the country’s biggest tourist destinations and a major convention, commerce and manufacturing center. San Francisco is the seat of the Pacific Stock Exchange and has been a financial power since gold rush days. It ranks second only to New York in banking activity...

Architecturally, San Francisco is characterized by two sharply contrasting styles: sleek skyscrapers and late 19th-century wooden houses collectively known as Victorians. In an area where space is at a premium, both types of structures stress the vertical. San Francisco’s skyline is notably compact... While the majority of downtown’s steel-and-glass towers date only from the late 1960s, most of the finest Victorians were built 1870-1906. Standing close together, as there is precious little room for extensive gardens

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121 Carey & Co. Inc. Architecture, 10-14.
or grounds, these ‘painted ladies’ are another San Francisco symbol.\textsuperscript{122}

4.2.3 Location and Access

The Palace is located along Lyon Street between Bay and Jefferson Streets in the Marina District of San Francisco. The back of the Palace backs to the Presidio, which is now owned by the National Park Service as part of the Golden Gate National Recreation Area. The parking area for the Exploratorium is owned by the Presidio Trust and is currently being looked at in the Doyle Drive Revamp Plan in an effort to improve the parking situation for the Palace as well as improve access to the Golden Gate Bridge.

The site can be accessed conveniently by car from the north via California 101, which comes down over the Golden Gate Bridge. The first exit in San Francisco drops you off at the doorstep of the Palace of Fine Arts. From the south in city, the Marina District is accessed easily by car. Lombard Street carries California 101 from Van Ness Avenue only a few blocks from the site. One the other side of the site is Marina Boulevard is also a major thoroughfare. Parking is currently free in the two parking lots on the site and there is available street parking, though street parking is often limited due to the Marina, Crissy Field, Chestnut Street shopping area, and general residential neighborhood nature. Via public transportation the site is easily accessed by San Francisco MUNI bus route 30-Stockton to the Marina stop. From Market Street (in the financial district of downtown) the bus ride is approximately 15 minutes. An

express bus, the 30-X, also runs from the financial district to within a few blocks of the Palace during rush hour. The Palace is also just a short walk from the Marina.

Once on the site there are ample footpaths around the lagoon and through the colonnade to all of the entrances to the main building. If arriving by car the parking lots are an easy walk to the main entrances to both the Exploratorium and the Palace of Fine Arts Theater as well as all other doors to the main building.

4.2.4 Context

The site is located in the Marina District in San Francisco. The Marina district is a predominantly residential neighborhood with ample opportunity for hiking, shopping, dining, city walk sightseeing, and inline skating.¹²³

On the Marina’s commercial blocks on Chestnut Street between Franklin and Lyon Streets, you can find a full array of coffeehouses, restaurants, and shops targeting the sleek and the slender. This is the neighborhood of choice for newly arrived singles. Tourists stop by to see Fort Mason Center, the Palace of Fine Arts, and the Exploratorium.¹²⁴

The Marina District is

..one of San Francisco’s most desirable neighborhoods, [and] is sought after because of its great proximity to the Bay and Golden Gate Bridge, which can whisk you away to the

natural beauty of Marin County. Its 1920s Mediterranean architecture features flats, apartment buildings and houses with wide bay windows, coved ceilings and hardwood floors.\(^{125}\)

4.2.5 Adjacent Buildings

The adjacent properties to the north, east, and south are all upscale residential properties - single and two family houses. To the west the property belongs to the National Park Service as part of the Golden Gate National Recreation Area. This area, the Presidio, was once a military base and barrack-like buildings still remain which border the site.

The most notable built feature that borders the site are the California 101 exit and entrance ramps that have resulted in barbed wired chain link fences to be installed at the edges of the property along these edges. The ramps are unsightly and inhibit and interaction between the Palace and

the Presidio because of the high speed traffic ramps and uninviting under ramp areas.

The locked location allows little room for future expansion on the site. The portion of the site currently being used for parking is owned by the Presidio Trust, while the rest of the site is owned by the City of San Francisco and under the control of the Recreation and Park Department. In January 2003 a Historic Structures Report Draft was submitted in an effort to place the Palace of Fine Arts on the National Register of Historic Places. If the Report passes through, the site will be strictly regulated as far as renovations and additions. The Bureau of Architecture of the City of San Francisco is working on the restoration of the lagoon, rotunda, colonnade, and park; however, the main building is not included in this phase of the restoration. Hopefully further funding will allow for the restoration of the main building as well. The portion of the site owned by the Presidio Trust is currently being looked at in the Doyle Drive Revamp Plan in an effort to improve the parking situation for the Palace as well as improve access to the Golden Gate Bridge. Any additions to the building will have to be carefully considered.

The other tenant of the Palace of Fine Arts, the Palace of Fine Arts Theater has a long-term contract with the San Francisco Recreation and Park Department. All renovations must be sensitive to their tenancy and needs in issues such as parking and access.
4.2.6 Views

The views from the site are stunning. The Exploratorium has installed a web cam on the room of the Palace that feeds up to the minute views at http://cams.exploratorium.edu/CAM2/index.html. Views to the Golden Gate Bridge, the windsurfing area in the San Francisco Bay, and Alcatraz & the Marina are the more stunning views available.

To the day-to-day visitor the lagoon, rotunda, and colonnade offer numerous photo opportunities with weddings regularly occurring in the rotunda. Wedding parties taking photographs is nearly a daily event. The park provides a wonderful setting, protected from the winds of the bay for a family picnic or just a walk. The paths are common routes for joggers, and the main path through the colonnade is even used for the San Francisco Chronicle Marathon.

4.2.7 Climatology

Because of its temperate location in California, the climate of San Francisco is often misinterpreted. Unlike much of the rest of coastal California, summer temperatures rarely top 70 degrees F and are usually even cooler. The city is its warmest in September and October and gets chilly and damp November through March although blue skies and temperatures in the low 60s do peek through occasionally even in February. Fog can be anticipated year-round and is particularly heavy in the mornings during July and
August.\textsuperscript{126} The fog patterns are very regular and can easily be predicted, although they differ even amongst neighborhoods.

The San Francisco area sits in the pacific fog belt. Siting guidelines for this zone make the following recommendations:

- The best sites are those that are sheltered on medium slopes facing southwest to southeast. The best sites are sheltered from fog and winds, both of which have very regular patterns.

- A good site is a flat site in a wind shelter or on shallow slopes in any direction. On slopes over 15\%, southwest to southeast slopes will all east west roads.

- Poor site are those on windy ridges and hilltops.\textsuperscript{127}

The Palace of Fine Arts would qualify as a 'good site' as it sits on a flat site protected from the San Francisco Bay by a slight rise then slope down to the bay and by a highway entrance ramp.

A few specifics on the climate follow:

\textbf{San Francisco's Average Temperatures (degrees F) and Rainfall (inches)}\textsuperscript{128}

\begin{tabular}{|l|l|l|l|l|l|l|l|l|l|l|}
\hline
\hline
\textbf{High} & 56 & 59 & 60 & 61 & 63 & 64 & 64 & 65 & 69 & 68 & 63 & 57 \\
\hline
\textbf{Low} & 46 & 48 & 49 & 49 & 51 & 53 & 53 & 54 & 56 & 55 & 52 & 47 \\
\hline
\textbf{Rain} & 4.5 & 2.8 & 2.6 & 1.5 & 0.4 & 0.2 & 0.1 & 0.1 & 0.2 & 1.1 & 2.5 & 3.5 \\
\hline
\end{tabular}

\textsuperscript{126} Tevis, 13-14.
\textsuperscript{128} Tevis, 15.
• Mean daily temperature range in January: 10 degrees F
• Mean daily temperature range in July: 20 degrees F
• Mean annual temperature range: 10 degrees F
• Mean daily relative humidity: 80%
• Mean annual total precipitation: 32”
• Mean annual number of days with 0.01” or more precipitation: 60 days
• Mean annual total snowfall: 0-1”
• Mean daily solar radiation: 400 langleys
• Mean total hours sunshine annually: 2800 hours
• Mean annual number of clear days, sunrise to sunset: 160 days

Sunlight characteristics on the site change in short distances due to its climatic zone. As well the site is not subject to combined ground frost and moisture conditions, 1% minimum swale gradients are acceptable.  

Recognizable particularly to the site of the Palace of Fine Arts is its location so near to the San Francisco Bay that it does catch particularly cool winds coming off the bay. However, fog that often rolls in over the bay consuming the nearby Golden Gate Bridge, often hovers high over the Palace of Fine Arts as it sits on a low site, while the fogs consumes the surrounding hills. It is however affected by the moisture in the air brought in both by the bay and the fog.

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129 Langleys are equal to gram calories/square centimeters.
130 A clear day, sunrise to sunset, has a sky cover of 0-3 tenths.
4.2.8 Geological Considerations

The site, when the Palace was originally built on the site, was “on a dismal piece of filled land next to a brackish sump erected partly by springs, partly by seepage from the Bay.”\footnote{\textsuperscript{132} Newhall, 17.}

San Francisco falls into seismic zone 3. In the case of an earthquake this zone would receive major damage. Seismic zone 3 corresponds to an intensity of VIII and higher on the MM (Modified Mercalli Intensity Scale of 1931).\footnote{\textsuperscript{133} DeChiara, \textit{Timesaver Standards for Site Planning}, 100.} The scale ranges from V-Light to X-Very Violent.

The Palace of Fine Arts site falls into a zone that would likely receive an intensity of IX (Violent) in the event of an earthquake.\footnote{\textsuperscript{134} Association of Bay Area Governments. “ABAG Earthquake Shaking Hazard Maps,” http://www.abag.ca.gov/bayarea/eqmaps/pickcity.html.}

The nearby San Andreas Fault is a classic ‘Strike Skip’ fault: the two sides (for the most part) move past each other horizontally. (San Francisco Bay is there at least partly because the block between the San Andreas on the West and the Hayward fault on the East has been down dropped a bit, but that motion is small compared to the tremendous horizontal displacements that have occurred along these faults.)\footnote{\textsuperscript{135} Stanford Exploration Project, “The San Andreas Fault and the San Francisco Bay Area,” http://sepwww.stanford.edu/oldsep/joe/fault_images/BayAreaSanAndreasFault.html.}

The site has a high liquefaction hazard level in the event of an earthquake. The liquefaction hazard determines
areas where ground is susceptible to liquefaction and that are likely to be shaken hard enough to trigger liquefaction. Liquefaction is the action of soil behaving like quicksand when shaken. When the ground liquefies in an earthquake, sandy or silty materials saturated with water behave like a liquid, causing pipes to leak, roads and airport runways to buckle, and building foundations to be damaged.\textsuperscript{136}

The site also falls under the category of ‘flat land’ that is identified as

areas of gently slope at low elevation that have little or no potential for the formation of slumps, translational slide, or earth flows except along stream banks and terrace margins...Slides and earth flows are landslides that can pose serious hazard to property in the hillside terrain of the San Francisco Bay region. They tend to move slowly and thus rarely threaten life directly. When they move – in response to such changes as increased water content, earthquake shaking, addition of load, or removal of down slope support – they deform and tilt the ground surface. The result can be destruction of foundations, offset of roads, and breaking of underground pipes within and along the margins of the landslide, as well as overriding of property and structures down slope.\textsuperscript{137}

Finally, San Francisco County is currently part of a pilot program to look at the potential effect of possible


tsunamis. The threat is certainly important to the Palace of Fine Arts site as it is a coastal site.\(^\text{138}\)

4.2.9 Parcel Information

- Block and lot number: 0916 002
- Zoning: Public
- Lot Area: 684,763sf
- Nearest school: Newcomer High School
- Nearest public library: Marina Branch Library
- Street sweeping schedule:
  - Baker Street (left side 3601-3699) – Wednesday 6-8AM
  - Baker Street (right side 3600-3698) – Monday 11AM-1PM
  - Bay Street (left side 2401-2499) – Tuesday 6-8AM
  - Bay Street (right side 2400-2498) – Wednesday 6-8AM
- Elected officials:
  - Board of Supervisors: District 2, Newsom
  - US House of Representatives: 8\(^{th}\) Congressional District, Nancy Pelosi
  - State Senate: 3\(^{rd}\) Senatorial District, John Burton
  - State Assembly: 13\(^{th}\) Assembly District, Mark Leno
  - BART Board of Directors: BART District, Area 8, James Fang

4.2.10 Other Site Issues

The site falls into termite zone region 1 in which termite protection is required in all areas. If construction is slab on grade type a chemical barrier should be used, except that monolithic slab design may be considered as termite protection when acceptable to the HUD field department.\textsuperscript{139}

\textsuperscript{139} DeChiara, \textit{Timesaver Standards for Site Planning}, 102.
Chapter Five

5.1 Building

5.1.1 Location

Availability of necessary support services

The program requires very few support services, aside from catering during performances. Since the site is easily accessible by vehicle, any support services should have no problem getting to the site. As well, being located in a major city, there is a plethora of support services within a very small distance.

Compatibility with adjacent facilities

Adjacent to the Exploratorium space is the Palace of Fine Arts Theater, also housed in the same structure. The transformation of the Exploratorium space into a space for Circus Center transforms the entire complex into a place for the arts. “The rotunda and colonnade were for transition, Maybeck said, ‘between the world of reality and the world of art.’”\textsuperscript{140} The Circus Center program seems like a perfect fit with the original architects desire for the building, and the Palace of Fine Arts Theater seems to already fit the bill.

Appropriateness of location in terms of marketability

The location is a well-known landmark in San Francisco and holds a special place in the hearts of many. The Palace has been searching for a qualified tenant since

\textsuperscript{140} Newhall, 42.
the 1915 Exposition and Circus Center would provide an appropriate tenant whose school, being on track to being internationally recognized, would attract a worldly clientele. The Palace of Fine Arts has a feeling of grandness and elegance as well as the attraction of the family oriented neighborhood of the Marina, which makes it easily marketed to a wide-range of potential patrons and students.

5.1.2 Building Properties

**Appropriateness of size and volume of the shell**

The space is 86,136.7 square feet. Due to programmatic needs, some parts of the space will need to be constructed into two stories, which the shell makes possible. The spatial requirements for a circus building require that the ceilings be at an ideal height of 20 meters (65’ 7.5”) at the cupola and a minimum of 15 meters (49’ 2.5”) at the lowest point above the performance and training spaces. The ceilings in the Palace are 56’ 4 5/8” between trusses, and 47’ 5 _" at the trusses, making the volume of the space nearly appropriate for Circus Center’s needs.141

**Appropriateness of the shell shape in plan and section**

The shell shape in plan is that of an arc encompassing 120 degrees, 54 minutes in a circle with inner radius of 377’ 7” and outer radius of 512’ 0”. There are many spaces in the plan that must be circular in nature,

but will fit within the inside and outside arcs of the Palace building. The sectional profile of the Palace building, while not ideal with a maximum height of 56’ 4 5/8”, will adapt fine to the needs of the Circus Center whose only ideal desires are an open plan with a clear height of 20m (65’ 7.5”) at the cupola to a minimum of 15m (49’ 2.5”) at the lowest point above the performance or training space.\(^{142}\)

**Appropriateness of the edges of the shell**

The stucco walls of the Main Building are in good condition and exhibit minor soiling and biological growth...The Main Building suffers...graffiti...Most Areas have been painted to cover the graffiti, but the paint colors seldom match the existing wall colors...finding the matching paint color should not be difficult. The paint on the stucco walls is in good condition...

The Main Building as it stands does not fully sustain the original design vision for the Palace of Fine Arts. Much of the ornamentation was not reconstructed [in the 1964 restoration efforts] and as such it loses some of its integrity.\(^{143}\)

The Historic Structure and Landscape Report states to,

Consider reconstructing missing decorative elements of the Main Building exterior, including missing columns, planters and decorative figures, and the east elevation. These are the most significant architectural elements, which were excluded from the initial reconstruction, and their absence greatly reduces the experience of the promenade between the Colonnade and Main Building.\(^{144}\)


\(^{143}\) Carey & Co. Inc. Architecture, 35.

\(^{144}\) Ibid., 47.
The condition of the shell however is still sound and appropriate for the proposed program.

*Appropriateness of the structural system*

The building has a width of about 135’, created by a series of exposed steel trusses forming three-hinged arches. The roof is supported by exposed purlin trusses spanning between the arches. These purlin and arches are constructed of riveted pairs of steel angles.\(^\text{145}\)

The system will provide sufficient attachment points for the rigging apparatus required of the circus. The structural system dates from the original 1915 construction, but is in fine shape.

\(^{145}\) Ibid., 42.
5.2 Program Spaces

5.2.1 Front of House Spaces

Front of house spaces are the required spaces that serve theatre patrons prior to the performance, during intermission, and after the performance. These spaces typically include all areas the patron will encounter from the parking lot to the interior of the audience chamber. Much care will be given to these spaces as they determine the initial impression of the patron’s theatrical experience. Careful consideration must be made of how the patron gets into the building, to the box office, and eventually to the seat.\footnote{DeChiara, \textit{Timesaver Standards for Building Types, 4\textsuperscript{th} ed.}, 724.}

VESTIBULE

<table>
<thead>
<tr>
<th>FLOOR AREA</th>
<th>2000sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITY DESCRIPTION</td>
<td>This space acts as the entry to the circus building, and as a transition space. The space is not for assembly of the audience; it is a space to move through from the outdoors before entering the foyer.</td>
</tr>
<tr>
<td>OCCUPANCY</td>
<td>All users.</td>
</tr>
</tbody>
</table>
| SPACE ADJACENCY | • Direct connection to main outdoor entrance is required.  
• Direct connection to foyer is required.  
• Direct connection to box office is appropriate.  
• Doors should be lockable with a security system installed.  
• Automated doors opening outward for egress not to require a force stronger than 15lb. To stop. Level or push/pull assembly.  
• Adequate signage for exit. |
| SAFETY AND SECURITY | This space should express a hint of the quality and purpose of the circus.  
Adequate space for waiting lines at box office windows.  
• Sound absorptive acoustics.  
• Background noise criteria rating of NC-35-40.  
General florescent lighting without bright sources.  
• This space provides a ventilation discontinuity between the outdoors and the foyer, maximum thermal break should be provided.  
• Humidity not to exceed 30%.  
• Temperature to be 65-72 degrees F.  
• 67% circulated air, 33% fresh air.  
Public telephones.  
• If connected to the box office, the line for tickets needs enough space so as not to block traffic routes through to the lobby. |

\textsuperscript{146} DeChiara, \textit{Timesaver Standards for Building Types, 4\textsuperscript{th} ed.}, 724.
• Location on the level of the exterior for ease of entry is important.
• Sight lines to the vehicle drop area would be desirable.
• A canopy over the entrance is desirable.
• The materials used to finish this space must be durable due to the large number of people entering through this area.
• SFBC (San Francisco Building Code [incorporates 2001 California Building Code (which incorporates the 1997 UBC(Uniform Building Code)) plus 2001 San Francisco amendments])
• ADA (Americans with Disabilities Act)

**CODES**

**FOYER**

**FLOOR AREA**

24000sf

**ACTIVITY DESCRIPTION**

Pre-event and intermission space for audience assembly.

**OCCUPANCY**

Circus patrons and ticket taking staff.

**SPACE ADJACENCY**

• Direct connection to vestibule is required.
• Direct connection to grand chapiteau is required.
• Direct connection to concessions and souvenir sales is required.
• Direct adjacency to patron restrooms is appropriate.
• Direct connection to coatroom is appropriate.

**SAFETY AND SECURITY**

This space should be monitored at all times the building is open either by someone in the box office or viewed from the receptionist’s desk.

**DESIGN QUALITIES**

• This space should be architecturally engaging and express the quality and purpose of the circus.
• This space should appear full of exciting people pre and post event and be organized to encourage social interaction.

**BEHAVIORAL QUALITIES**

• There should possibly be a space for latecomers to watch the show from until they can enter at an appropriate interval.
• There should be a space where tickets can be taken at the door.

**ACOUSTICS**

• Acoustical separation from the grand chapiteau is required.
• The materials used to finish this space must provide for sound dampening due to the large number of people entering through this area.
• Background noise criteria rating of NC-35-40.

**ILLUMINATION**

• General lighting without bright sources.
• Decorative lighting would be desirable.

**HVAC**

• This space will probably have its own HVAC system to accommodate the sudden heavy
loads of audience rush.

- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.
- Any furnishings (such as planters, benches, or display cases) should be arranged along the walls to facilitate traffic.
- There should be sparse comfortable seating, especially for those who cannot stand for long periods of time.
- The materials used to finish this space must be durable due to the large number of people entering through this area.
- A public address system is needed to call the audience to the grand chapiteau when the performance is about to begin.

**Furniture and Equipment**

<table>
<thead>
<tr>
<th>Furniture and Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any furnishings (such as planters, benches, or display cases) should be arranged along the walls to facilitate traffic.</td>
</tr>
</tbody>
</table>

**Special Needs**

<table>
<thead>
<tr>
<th>Special Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doors should be invisible from lobby, but easy to locate.</td>
</tr>
<tr>
<td>Should be near to a drinking fountain (which must be in compliance with ADA).</td>
</tr>
<tr>
<td>Finishes should be durable materials that can handle wet conditions.</td>
</tr>
</tbody>
</table>

**Codes**

SFBC, ADA

**Male Patron Restroom**

<table>
<thead>
<tr>
<th>MALE PATRON RESTROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Floor Area</strong></td>
</tr>
<tr>
<td>2 x 300sf</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal hygiene.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male circus patrons.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Space Adjacency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct adjacency to foyer is appropriate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety and Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual water closet stalls should have latch locks.</td>
</tr>
<tr>
<td>Partitions for privacy.</td>
</tr>
<tr>
<td>ADA accessible stall.</td>
</tr>
<tr>
<td>Vanity must meet ADA.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design Qualities</th>
</tr>
</thead>
<tbody>
<tr>
<td>This space should be of high quality of design with no less attention to detail than the foyer.</td>
</tr>
<tr>
<td>Each space within the space should convey a sense of privacy.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Behavioral Qualities</th>
</tr>
</thead>
<tbody>
<tr>
<td>This space should be fully functional at rush periods such as intermission including adequate circulation at entry.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acoustics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acoustic separation from foyer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>General florescent lighting without bright sources.</td>
</tr>
<tr>
<td>Decorative incandescent fixtures around vanity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HVAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humidity not to exceed 30%.</td>
</tr>
<tr>
<td>Temperature to be 65-72 degrees F.</td>
</tr>
<tr>
<td>67% circulated air, 33% fresh air.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Furniture and Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 water closets total minimum.</td>
</tr>
<tr>
<td>14 urinals total minimum.</td>
</tr>
<tr>
<td>6 lavatories in countertop total minimum.</td>
</tr>
<tr>
<td>Mirrors at lavatories.</td>
</tr>
<tr>
<td>1 full-length mirror.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doors should be invisible from lobby, but easy to locate.</td>
</tr>
<tr>
<td>Should be near to a drinking fountain (which must be in compliance with ADA).</td>
</tr>
<tr>
<td>Finishes should be durable materials that can handle wet conditions.</td>
</tr>
</tbody>
</table>
### FEMALE PATRON RESTROOM

<table>
<thead>
<tr>
<th>Floor area</th>
<th>2 x 500sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity description</td>
<td>Personal hygiene.</td>
</tr>
<tr>
<td>Occupancy</td>
<td>Female circus patrons.</td>
</tr>
<tr>
<td>Space adjacency</td>
<td>Direct adjacency to foyer is appropriate.</td>
</tr>
</tbody>
</table>
| Safety and security | - Individual water closet stalls should have latch locks.  
- ADA accessible stall.  
- Vanity must meet ADA. |
| Design qualities | - This space should be of high quality of design with no less attention to detail than the foyer.  
- Each space within the space should convey a sense of privacy. |
| Behavioral qualities | This space should be fully functional at rush periods such as intermission including adequate circulation at entry.  
- Acoustic separation from foyer. |
| Acoustics | General florescent lighting without bright sources.  
- Decorative incandescent fixtures around vanity. |
| Illumination | Humidity not to exceed 30%.  
- Temperature to be 65-72 degrees F.  
- 67% circulated air, 33% fresh air. |
| HVAC | - 26 water closets total minimum.  
- 14 lavatories in countertop total minimum.  
- Mirrors at lavatories.  
- 1 full-length mirror. |
| Furniture and equipment | - Doors should be invisible from lobby, but easy to locate.  
- Should be near to a drinking fountain (which must be in compliance with ADA).  
- Finishes should be durable materials that can handle wet conditions.  
- Handrails provided in ADA stall should be placed at 33” above floor.  
- Accessible lavatory must be placed a maximum of 32” from the floor with unobstructed knee clearance of 27” minimum. |
| Special needs | SFBC, ADA |

handle wet conditions.

- Handrails provided in ADA stall should be placed at 33” above floor.
- Accessible lavatory must be placed a maximum of 32” from the floor with unobstructed knee clearance of 27” minimum.
**BOX OFFICE**

**FLOOR AREA**
150sf

**ACTIVITY DESCRIPTION**
This booth is used for the sale of tickets and the recording of reservations.

**OCCUPANCY**
Office personnel or volunteers, one per window. (3 windows)

**SPACE ADJACENCY**
- Direct connection to the vestibule is appropriate.
- Direct connection to the exterior could be desirable.
- Proximity to other administrative spaces is desirable.
- Direct connection to coatroom could be desirable to facilitate shared personnel.

**SAFETY AND SECURITY**
Must be able to be locked securely.

**DESIGN QUALITIES**
Highly organized.

**BEHAVIORAL QUALITIES**
This space should be fully functional at rush periods such as immediately pre-show.

**ACOUSTICS**
Carpet to reduce decibel level.

**ILLUMINATION**
General lighting without bright sources, with additional task-lighting to work surfaces.

**HVAC**
- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.

**FURNITURE AND EQUIPMENT**
- Computerized terminals are required for computerized booking, seating, and ticketing.
- Other needs are ticket racks, telephones, and a safe large enough for the racks, a cash box, and a ledger.
- Display space for the seating chart and a desk are also helpful.

**SPECIAL NEEDS**
- Multiple phone lines.
- Security cameras may be desirable.

**CODES**
SFBC, ADA

**COAT CHECK**

**FLOOR AREA**
1250sf

**ACTIVITY DESCRIPTION**
The space is used for the storage of patron outerwear during performances.

**OCCUPANCY**
Office personnel or volunteers.

**SPACE ADJACENCY**
- Direct connection to foyer is appropriate.
- Direct connection to box office could be desirable to facilitate shared personnel.

**SAFETY AND SECURITY**
This space should be monitored whenever coats are being stored.

**DESIGN QUALITIES**
Highly organized.

**BEHAVIORAL QUALITIES**
This space should be fully functional at rush periods such as before and after shows.

**ACOUSTICS**
Avoid auditory barrier between patrons at counter and clerk.
**ILLUMINATION** | General lighting without bright sources.
---|---
**HVAC** | - Humidity not to exceed 30%.
| - Temperature to be 65-72 degrees F.
| - 67% circulated air, 33% fresh air.
**FURNITURE AND EQUIPMENT** | - Racks for coats, hats, canes, umbrellas, and parcels.
| - Ample space between racks is required for ease of attendant circulation.
**SPECIAL NEEDS** | None.
**Codes** | SFBC, ADA

### CONCESSION SALES

<table>
<thead>
<tr>
<th><strong>Floor Area</strong></th>
<th>2 x 500sf</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity Description</strong></td>
<td>Sale of concessions before performances and at intermission.</td>
</tr>
<tr>
<td><strong>Occupancy</strong></td>
<td>Caterers and volunteers behind counter, circus patrons in seating areas.</td>
</tr>
</tbody>
</table>
| **Space Adjacency** | - Direct connection to foyer, if not part of enlarged foyer is appropriate.  
| | - Convenient path of travel from loading dock.  
| | - Near to patron restrooms is desirable. |
| **Safety and Security** | This space is open to the foyer but should have some lockable storage cabinets. |
| **Design Qualities** | This space should appeal to the appetite of the patron and appear attractive and affordable and full of exciting people making purchases. |
| **Behavioral Qualities** | - Routes to and from the grand chapiteau should not be impeded by the furniture groupings.  
| | - Adequate space for circulation between seating is required. |
| **Acoustics** | Background noise criteria rating of NC-35-40. |
| **Illumination** | - General florescent lighting without bright sources.  
| | - Decorative lighting over seating groupings. |
| **HVAC** | - Humidity not to exceed 30%.  
| | - Temperature to be 65-72 degrees F.  
| | - 67% circulated air, 33% fresh air. |
| **Furniture and Equipment** | - Tables and chairs. These should be grouped.  
| | - Refrigerator, tap, shelves, and counter behind the bar.  
| | - A separate hand sink is required.  
| | - Cash register. |
| **Special Needs** | Caterer provides food and drinks, so a full-scale kitchen is not necessary. |
| **Codes** | SFBC, ADA |

### SOUVENIR SALES

<table>
<thead>
<tr>
<th><strong>Floor Area</strong></th>
<th>2 x 500sf</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity Description</strong></td>
<td>Sale of souvenirs before and after performances and at intermission.</td>
</tr>
<tr>
<td><strong>Occupancy</strong></td>
<td>Personnel or volunteers serving circus patrons.</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td><strong>Space Adjacency</strong></td>
<td>Personnel or volunteers serving circus patrons.</td>
</tr>
<tr>
<td></td>
<td>• Direct connection to foyer, if not part of enlarged foyer is appropriate.</td>
</tr>
<tr>
<td></td>
<td>• Convenient path of travel from loading dock.</td>
</tr>
<tr>
<td></td>
<td>• Near to patron restrooms is desirable.</td>
</tr>
<tr>
<td></td>
<td>• Adequate circulation between displays is required.</td>
</tr>
<tr>
<td><strong>Safety and Security</strong></td>
<td>This space is open to the foyer but should have some lockable storage cabinets for merchandise.</td>
</tr>
<tr>
<td><strong>Design Qualities</strong></td>
<td>This space should appear attractive and affordable and full of exciting people making purchases.</td>
</tr>
<tr>
<td><strong>Behavioral Qualities</strong></td>
<td>Routes to and from the grand chapiteau should not be impeded.</td>
</tr>
<tr>
<td></td>
<td>• Ample circulation by check out desk is desirable.</td>
</tr>
<tr>
<td></td>
<td>• Adequate signage for products and pricing is necessary.</td>
</tr>
<tr>
<td><strong>Acoustics</strong></td>
<td>Background noise criteria rating of NC-35-40.</td>
</tr>
<tr>
<td><strong>Illumination</strong></td>
<td>General florescent lighting without bright sources.</td>
</tr>
<tr>
<td></td>
<td>• Task lighting over check out desk.</td>
</tr>
<tr>
<td></td>
<td>• Focal track lighting on products.</td>
</tr>
<tr>
<td><strong>HVAC</strong></td>
<td>Humidity not to exceed 30%.</td>
</tr>
<tr>
<td></td>
<td>• Temperature to be 65-72 degrees F.</td>
</tr>
<tr>
<td></td>
<td>• 67% circulated air, 33% fresh air.</td>
</tr>
<tr>
<td><strong>Furniture and Equipment</strong></td>
<td>Computerized cash registers are required for computerized sales.</td>
</tr>
<tr>
<td></td>
<td>• Storage space behind counter.</td>
</tr>
<tr>
<td></td>
<td>• Displays on floors, walls and counters.</td>
</tr>
<tr>
<td><strong>Special Needs</strong></td>
<td>Counter at check out must have a lowered counter no higher than 34”.</td>
</tr>
<tr>
<td></td>
<td>• Circulation must accommodate ADA requirements.</td>
</tr>
<tr>
<td><strong>Codes</strong></td>
<td>SFBC, ADA</td>
</tr>
</tbody>
</table>
5.2.2 Grand Chapiteau

The performance experience is fundamentally about the relationship between the performers and the audience. The audience wants to hear and see the show without distraction and in comfort and safety, but its ultimate objective in attending the show is to receive the utmost sensory stimulation toward the maximum emotional and intellectual experience.

The design of the house therefore is driven by a number of considerations, including the performance type or types, the seating capacity, visual criteria, acoustical criteria, and architectural goals.\(^{147}\)

RING

<table>
<thead>
<tr>
<th>FLOOR AREA</th>
<th>13m (42.64’) diameter. (1452sf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITY DESCRIPTION</td>
<td>This is the performance space during performances. At all other times it is the primary practice space for the professional school.</td>
</tr>
<tr>
<td>OCCUPANCY</td>
<td>Artists and coaches. Performance casts typically to no more than 25.</td>
</tr>
</tbody>
</table>
| SPACE ADJACENCY | • The ring is open to the seating 3/4 of the way around.  
• Several vomitoria should occur through the audience seating space for use by the performers only with three to four entrances to the ring.  
• Two ramps should connect the orchestra gallery/stage to the ring on either side.  
• Direct connection to backstage warm-up space is required.  
• Proximity to the artists’ green room would be desirable.  
• Proximity to the backstage toilets would be desirable. |
| SAFETY AND SECURITY | Appropriate rigging for artist’s safety. |
| DESIGN QUALITIES | This space should be fully adaptable to different themed shows. |
| BEHAVIORAL QUALITIES | This space must fulfill all the functional technical requirements of the circus and be easily adaptable for any other art. |
| ACOUSTICS | • The grand chapiteau must be acoustically separated from other parts of the building and the outside.  
• Provide reverberation time of 1.2-1.4 seconds.  
• Background noise criteria rating of NC-35-40.  
• The ‘sending end’ of the room should be acoustically hard. Walls near the performer should be angled or splayed to enhance projection and prevent ‘flutter echoes’ in the |

\(^{147}\) Ibid., 727.
**Interpersonal Interactions in the New Circus**

### Illumination
- Ability to black out all natural light is required.
- Natural light is desirable when space is used as a practice space.
- Gridiron and ring at perimeter of ring must be provided above ring for stage lighting.
- Moving spotlight platforms should be located to facilitate lighting from all sides.
- Work lights – general lighting for set-up and practice.

### HVAC
- Ring must be well ventilated, but HVAC must be silent.
- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.

### Furniture and Equipment
- Flying trapeze rig.
- Chalk bins, on wheels.

### Special Needs
- Clean/untied ground power supply for sound equipment.
- Large disconnects (2 400 or 1 400 and 1 200 amp) on electronic network.
- Total feed size of 1600amps (3 phase, 120/208 VY)
- 400-600 each of circuits and dimmers.
- Height must be no less than 15m (49’ 2.5”), ideally 20m (65’ 7.5”).
- Flooring should be rubber/foam on suspended floor.
- If desirable to have a trap room below the stage, trap room height should be 14’.
- Possibility for a double ceiling about the ring with catwalk and hatches in lower ceiling for entrances from the ceiling.

### Codes
- SFBC, ADA

### Seating

<table>
<thead>
<tr>
<th>Floor Area</th>
<th>16000sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Description</td>
<td>Seating area for circus patrons during performances. Circus patrons, 2000 seats.</td>
</tr>
<tr>
<td>Occupancy</td>
<td></td>
</tr>
<tr>
<td>Space Adjacency</td>
<td>The seating wraps 3/4 of the way around the ring.</td>
</tr>
<tr>
<td>Safety and Security</td>
<td>Safety lighting in aisles.</td>
</tr>
<tr>
<td>Design Qualities</td>
<td>This space should be architecturally engaging and express the quality and purpose of the circus.</td>
</tr>
<tr>
<td>Behavioral Qualities</td>
<td>Seating should be arranged to provide optimal sight lines for all patrons.</td>
</tr>
<tr>
<td>Acoustics</td>
<td>The grand chapiteau must be acoustically separated from other parts of the building and the outside.</td>
</tr>
<tr>
<td></td>
<td>Protrusions and angled surfaces on the walls can enhance sound diffusion.</td>
</tr>
</tbody>
</table>
### Interpersonal Interactions in the New Circus

<table>
<thead>
<tr>
<th>Walls and ceilings should be hard so they can reflect sound, unless absorptive treatment is needed to eliminate problematic reflections or focusing or to reduce reverberation time.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpeted aisles help reduce footfall noise.</td>
</tr>
<tr>
<td>Provide reverberation time of 1.2-1.4 seconds.</td>
</tr>
<tr>
<td>Background noise criteria rating of NC-35-40.</td>
</tr>
<tr>
<td>Lighting should be fully adjustable, but also decorative when lit.</td>
</tr>
<tr>
<td>Several rings above seating for stage lighting of the ring must be provided.</td>
</tr>
</tbody>
</table>

#### ILLUMINATION

<table>
<thead>
<tr>
<th>HVAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC must be silent.</td>
</tr>
<tr>
<td>Due to the size of the auditorium, it should be served by its own HVAC system.</td>
</tr>
<tr>
<td>Humidity not to exceed 30%.</td>
</tr>
<tr>
<td>Temperature to be 65-72 degrees F.</td>
</tr>
<tr>
<td>67% circulated air, 33% fresh air.</td>
</tr>
</tbody>
</table>

#### HVAC

<table>
<thead>
<tr>
<th>Furniture and Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfortable upholstered seating for 2000 staggered for three rows and raked to allow similar sightlines for all of the audience.</td>
</tr>
</tbody>
</table>

#### Furniture and Equipment

<table>
<thead>
<tr>
<th>Special Needs Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height must be no less than 15m (49’ 2.5”).</td>
</tr>
</tbody>
</table>

#### Special Needs Codes

<table>
<thead>
<tr>
<th>Orchestra Stage/Gallery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Area</td>
</tr>
<tr>
<td>260sf</td>
</tr>
<tr>
<td>Activity Description</td>
</tr>
<tr>
<td>This space is for the orchestra to play during performances, but may also double as a second stage for artists in the show desires that effect.</td>
</tr>
<tr>
<td>Occupancy</td>
</tr>
<tr>
<td>13 member or smaller orchestra and artists.</td>
</tr>
<tr>
<td>Space Adjacency</td>
</tr>
<tr>
<td>This space is either located above the artist’s main entrance to the ring, or opposite the artist’s main entrance to the ring amidst the seating. There must be ramps connecting this space to the ring and telescopic staircases connecting this space to the main floor level.</td>
</tr>
<tr>
<td>A direct and visual connection (not through a monitor) to the ring is required.</td>
</tr>
<tr>
<td>Adjacent to the seating area.</td>
</tr>
<tr>
<td>Safety and Security</td>
</tr>
<tr>
<td>None.</td>
</tr>
<tr>
<td>Design Qualities</td>
</tr>
<tr>
<td>Should not overpower main ring in design.</td>
</tr>
<tr>
<td>Behavioral Qualities</td>
</tr>
<tr>
<td>This space must be easily accessed with large instruments.</td>
</tr>
<tr>
<td>Acoustics</td>
</tr>
<tr>
<td>The grand chapiteau must be acoustically separated from other parts of the building and the outside.</td>
</tr>
<tr>
<td>Background noise criteria rating of NC-35-40.</td>
</tr>
<tr>
<td>The orchestra must not be obstructed acoustically from the ring and seating in any way.</td>
</tr>
<tr>
<td>Walls should be of a hard surface but with movable curtains to vary and control sound reflection.</td>
</tr>
</tbody>
</table>
ILLUMINATION

Individual stand lighting for each musician's music stand.

HVAC

• HVAC must be silent.
• Humidity not to exceed 30%.
• Temperature to be 65-72 degrees F.
• 67% circulated air, 33% fresh air.

FURNITURE AND EQUIPMENT

Seating and music stands for all musicians. Musical instruments and accessories as needed.

SPECIAL NEEDS

None.

CODES

SFBC, ADA

SOUND BOOTH

FLOOR AREA

200sf

ACTIVITY DESCRIPTION

This space is the main control booth for the sound technicians performing audio reinforcement and effects/noises.

OCCUPANCY

Sound technicians.

SPACE ADJACENCY

• A direct and audio connection (not through a monitor) to the ring is required.
• Adjacent to the seating area.

SAFETY AND SECURITY

This space must be able to be locked to secure equipment.

DESIGN QUALITIES

Inconspicuous to audience.

BEHAVIORAL QUALITIES

This space must be highly functional and expandable to accommodate upgrades over time in equipment.

ACOUSTICS

• The grand chapiteau must be acoustically separated from other parts of the building and the outside.
• Background noise criteria rating of NC-35-40.
• The sound technician must be able to hear exactly what the audience is hearing.

ILLUMINATION

• Low light levels are required, with possible use of blue lights, for operation of the boards.
• Entrance doors must be light-trapped to avoid light spill into the auditorium and to avoid disrupting operator's dark adaptation.

HVAC

• HVAC must be silent.
• Ventilated to remove heat from the circuits.
• Humidity not to exceed 30%.
• Temperature to be 65-72 degrees F.
• 67% circulated air, 33% fresh air.

FURNITURE AND EQUIPMENT

Sound equipment racks (tape decks, mixers (small board is 6’x3’, often there is more than one board), speakers, amplifiers, microphones, phonographs, CD player, etc.)

SPECIAL NEEDS

• Electrical connection to stage.
• Cabling to sound equipment.

CODES

SFBC, ADA
### LIGHTING BOOTH

<table>
<thead>
<tr>
<th><strong>FLOOR AREA</strong></th>
<th>200sf</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACTIVITY DESCRIPTION</strong></td>
<td>This space is the main control booth for the lighting technicians, which contains the master controls for stage lighting (independent circuit controls, color change controls, remote spotlight controls) and ancillary lighting (house lights, stage master control, cleaners' master control, safety indicator, and local intensity control).</td>
</tr>
<tr>
<td><strong>OCCUPANCY</strong></td>
<td>Lighting technicians.</td>
</tr>
</tbody>
</table>
| **SPACE ADJACENCY** | - A visual connection to the ring is required.  
- This space is best located as close to the centerline as possible and must be elevated above the last row of seats at the orchestra level and to ensure an unobstructed view.  
- Adjacent to the seating area. |
| **SAFETY AND SECURITY** | This space must be able to be locked to secure equipment. |
| **DESIGN QUALITIES** | Inconspicuous to audience. |
| **BEHAVIORAL QUALITIES** | This space must be highly functional and expandable to accommodate upgrades over time in equipment. |
| **ACOUSTICS** | - The grand chapiteau must be acoustically separated from other parts of the building and the outside.  
- Connected to auditorium with ‘sound-proof’ observation window. |
| **ILLUMINATION** | - Low light levels are required, with possible use of blue lights, for operation of the boards.  
- Entrance doors must be light-trapped to avoid light spill into the auditorium and to avoid disrupting operator’s dark adaptation. |
| **HVAC** | - HVAC must be silent.  
- Ventilated to remove heat from the circuits.  
- Humidity not to exceed 30%.  
- Temperature to be 65-72 degrees F.  
- 67% circulated air, 33% fresh air. |
| **FURNITURE AND EQUIPMENT** | Lighting control desk with freestanding equipment rack. |
| **SPECIAL NEEDS** | - Electrical connection to stage, dimmers, lighting bridges, and slots. |
| **CODES** | SFBC, ADA |

### RING MANAGER’S OFFICE

<table>
<thead>
<tr>
<th><strong>FLOOR AREA</strong></th>
<th>150sf</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACTIVITY DESCRIPTION</strong></td>
<td>This space is the main control office for the ring manager.</td>
</tr>
<tr>
<td><strong>OCCUPANCY</strong></td>
<td>Ring manager.</td>
</tr>
</tbody>
</table>
| **SPACE ADJACENCY** | - A visual connection to the ring is required.  
- Adjacent to the seating area. |
<p>| <strong>SAFETY AND SECURITY</strong> | This space must be able to be locked as all other offices are. |</p>
<table>
<thead>
<tr>
<th><strong>DESIGN QUALITIES</strong></th>
<th>Inconspicuous to audience.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BEHAVIORAL QUALITIES</strong></td>
<td>This space must be highly functional and adaptable to accommodate different managers for different shows.</td>
</tr>
<tr>
<td><strong>ACOUSTICS</strong></td>
<td>The grand chapiteau must be acoustically separated from other parts of the building and the outside.</td>
</tr>
<tr>
<td><strong>ILLUMINATION</strong></td>
<td>• Low light levels are required.</td>
</tr>
<tr>
<td></td>
<td>• Entrance doors must be light-trapped to avoid light spill into the auditorium and to avoid disrupting ring manager’s dark adaptation.</td>
</tr>
<tr>
<td></td>
<td>• Task and general lighting.</td>
</tr>
<tr>
<td><strong>HVAC</strong></td>
<td>• HVAC must be silent.</td>
</tr>
<tr>
<td></td>
<td>• Humidity not to exceed 30%.</td>
</tr>
<tr>
<td></td>
<td>• Temperature to be 65-72 degrees F.</td>
</tr>
<tr>
<td></td>
<td>• 67% circulated air, 33% fresh air.</td>
</tr>
<tr>
<td><strong>FURNITURE AND EQUIPMENT</strong></td>
<td>Outlet for video equipment and headsets.</td>
</tr>
<tr>
<td><strong>SPECIAL NEEDS</strong></td>
<td>• Intercom system connection to backstage spaces.</td>
</tr>
<tr>
<td><strong>CODES</strong></td>
<td>SFBC, ADA</td>
</tr>
</tbody>
</table>
### 5.2.3 Back of House Spaces

Backstage support spaces comprise the wide variety of dressing rooms, workrooms, and storage spaces needed to support what happens on stage.\(^{148}\)

#### BACKSTAGE WARM-UP SPACE

<table>
<thead>
<tr>
<th>Floor area</th>
<th>Ring: 13m (42.64’) diameter (1452sf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity description</td>
<td>This space is the warm-up space for performer’s before their act during performances, at all other times it is a second full-scale practice space for the professional school. This space also contains the assistant ring manager’s station.</td>
</tr>
<tr>
<td>Occupancy</td>
<td>Artists, assistant ring manager, and ring crew.</td>
</tr>
</tbody>
</table>
| Space adjacency | • Directly connection to grand chapiteau is required.  
• Proximity to artist’s green room and dressing rooms is desirable.  
• Convenient path of travel from workshop is desirable.  
• Near to backstage toilets and first aid station. |
| Safety and security | During performances this space must be inaccessible to the patrons. |
| Design qualities | This space should be relaxing to performers yet exude the excitement of the performance occurring in the main ring. |
| Behavioral qualities | • Everything must be colored black so as not to be seen by audience.  
• Ample space for both ring crew and artists to work during a production. |
| Acoustics | The space must be acoustically separated from other parts of the building and the outside except with a direct audio connection to the grand chapiteau. |
| Illumination | Natural lighting is desirable, so long as it can be entirely blacked out during performances. |
| HVAC | This space must be well ventilated. |
| Furniture and equipment | • AV equipment on mobile carts near ring entrance.  
• Costume carts on wheels for use when quick changes are necessary during a performance.  
• Drinking fountain.  
• Slop sink.  
• Compressed air.  
• Wall bars.  
• Wall mirrors are desirable so long as they are not in the sightlines for the audience or have curtains. |
| Special needs | • Ring monitor system screen.  
• Orchestra gallery/stage monitor screen. |

\(^{148}\) Ibid., 745.
Doors for bringing in props should be as large as possible.

**BACKSTAGE TOILETS**

**Floor Area**
2 x 100sf

**Activity Description**
These two stall toilet rooms are for the use of anyone in the backstage area.

**Occupancy**
Artists and ring crew.

**Space Adjacency**
- Near to backstage warm up space.
- Near to ring.

**Safety and Security**
- Individual water closet stalls should have latch locks.
- ADA accessible stall.

**Design Qualities**
Each space within the space should convey a sense of privacy.

**Behavioral Qualities**
Space should be fully functional at peak periods such as intermissions.

**Acoustics**
Acoustic isolation is desirable.

**Illumination**
General lighting.

**HVAC**
- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.

**Furniture and Equipment**
2 toilets, 2 lavatories, full-length mirror, waste bin.

**Special Needs**
- Should be near to a drinking fountain (which must be in compliance with ADA).
- Finishes should be durable materials that can handle wet conditions.
- Handrails provided in ADA stall should be placed at 33” above floor.
- Accessible lavatory must be placed a maximum of 32” from the floor with unobstructed knee clearance of 27” minimum.

**FIRST AID STATION**

**Floor Area**
150sf

**Activity Description**
This space is for the emergency attention of minor injuries (cuts, scrapes, sprains, fainting, etc.) and to be used as a waiting space for those needing called in medical attention.

**Occupancy**
Personnel trained in emergency first aid, artists, and coaches.

**Space Adjacency**
- Proximity to back stage warm up space, grand chapiteau, and other training spaces is highly desirable.
- Nearness to backstage toilets is desirable.

**Safety and Security**
- Washable surfaces and materials are desirable.
- Space should have some lockable storage cabinets.
### Design Qualities
Environment should feel non-intimidating and calming using subdued colors.

### Behavioral Qualities
- **Acoustics**
  - Acoustic isolation is desirable.
- **Illumination**
  - General lighting.

### HVAC
- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.

### Furniture and Equipment
- Bed, chairs, emergency first aid equipment.

### Special Needs
- Clean and sterile environment.

### Codes
SFBC, ADA

## Single Occupancy Dressing Rooms

<table>
<thead>
<tr>
<th>Floor Area</th>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x 150sf</td>
<td>These spaces are used for the performer’s preparations for the show, but is also a space where they can relax. Principal artists performing solo acts and guests.</td>
</tr>
</tbody>
</table>

### Occupancy
- Principal artists performing solo acts and guests.

### Space Adjacency
- Proximity to backstage warm up space is desirable.
- An accessible path to a barrier free entry is desirable.

### Safety and Security
These spaces must be fully secure with at least one lockable cabinet inside.

### Design Qualities
These spaces should express the prestige of the performer and provide them with comforts as appropriate to their status.

### Behavioral Qualities
This space should provide the performer with comforts as appropriate to their status.

### Acoustics
- Sound absorptive acoustics.

### Illumination
- General lighting, but natural lighting with blinds capable of blocking out light while putting on makeup would be desirable.
- Tungsten lighting at makeup station to match stage lights.

### HVAC
- Thermostat control.
- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.

### Furniture and Equipment
- Day bed, soft chairs, tables.
- Makeup station with mirror, lights, chair.
- Clothing rack.
- Small toilet room.
- Telephone.

### Special Needs
- Potable water supply.
- Ample electrical outlets, particularly near makeup station.
- Call and talkback system outlet.
- Ring monitor system speaker.

### Codes
SFBC, ADA
SMALL MULTIPLE OCCUPANCY DRESSING ROOMS

<table>
<thead>
<tr>
<th>FLOOR AREA</th>
<th>2 x 250sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITY DESCRIPTION</td>
<td>These spaces are used for the performer’s preparations for the show, but is also a space where they can relax.</td>
</tr>
<tr>
<td>OCCUPANCY</td>
<td>Artists performing solo or smaller acts and guests.</td>
</tr>
<tr>
<td>SPACE ADJACENCY</td>
<td>Proximity to backstage warm up space is desirable.</td>
</tr>
<tr>
<td>SAFETY AND SECURITY</td>
<td>Each makeup station should have a lockable locker.</td>
</tr>
<tr>
<td>DESIGN QUALITIES</td>
<td>These spaces should express the prestige of the performer and provide them with comforts as appropriate to their status.</td>
</tr>
<tr>
<td>BEHAVIORAL QUALITIES</td>
<td>This space should provide the performer with comforts as appropriate to their status but also be adaptable for changing occupants.</td>
</tr>
<tr>
<td>ACOUSTICS</td>
<td>Sound absorptive acoustics.</td>
</tr>
<tr>
<td>ILLUMINATION</td>
<td>- General lighting, but natural lighting with blinds capable of blocking out light while putting on makeup would be desirable.</td>
</tr>
<tr>
<td></td>
<td>- Tungsten lighting at makeup station to match stage lights.</td>
</tr>
<tr>
<td>HVAC</td>
<td>- Thermostat control.</td>
</tr>
<tr>
<td></td>
<td>- Humidity not to exceed 30%.</td>
</tr>
<tr>
<td></td>
<td>- Temperature to be 65-72 degrees F.</td>
</tr>
<tr>
<td></td>
<td>- 67% circulated air, 33% fresh air.</td>
</tr>
<tr>
<td>FURNITURE AND EQUIPMENT</td>
<td>- Makeup stations with mirror, lights, chair.</td>
</tr>
<tr>
<td></td>
<td>- Clothing racks.</td>
</tr>
<tr>
<td></td>
<td>- Small toilet room.</td>
</tr>
<tr>
<td>SPECIAL NEEDS</td>
<td>- Potable water supply.</td>
</tr>
<tr>
<td></td>
<td>- Ample electrical outlets, particularly near makeup station.</td>
</tr>
<tr>
<td></td>
<td>- Call and talkback system outlet.</td>
</tr>
<tr>
<td></td>
<td>- Ring monitor system speaker.</td>
</tr>
<tr>
<td>CODES</td>
<td>SFBC, ADA</td>
</tr>
</tbody>
</table>

LARGE MULTIPLE OCCUPANCY DRESSING ROOMS

<table>
<thead>
<tr>
<th>FLOOR AREA</th>
<th>2 x 700sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITY DESCRIPTION</td>
<td>These spaces are used for the performer’s preparations for the show, but is also a space where they can relax.</td>
</tr>
<tr>
<td>OCCUPANCY</td>
<td>Artists performing large acts and guests.</td>
</tr>
<tr>
<td>SPACE ADJACENCY</td>
<td>Proximity to backstage warm up space is desirable.</td>
</tr>
<tr>
<td>SAFETY AND SECURITY</td>
<td>Each makeup station should have a lockable locker.</td>
</tr>
<tr>
<td>DESIGN QUALITIES</td>
<td>These spaces should express the prestige of the performer and provide them with comforts as appropriate to their status.</td>
</tr>
<tr>
<td>BEHAVIORAL QUALITIES</td>
<td>This space should provide the performer with comforts as appropriate to their status but also be adaptable for changing occupants.</td>
</tr>
<tr>
<td>ACOUSTICS</td>
<td>Sound absorptive acoustics.</td>
</tr>
<tr>
<td>ILLUMINATION</td>
<td>- General lighting, but natural lighting with blinds capable of blocking out light while putting on makeup would be desirable.</td>
</tr>
</tbody>
</table>
**ARTISTS’ GREEN ROOM**

<table>
<thead>
<tr>
<th>FLOOR AREA</th>
<th>1500sf</th>
</tr>
</thead>
</table>

**Activity Description**
This is the space where artists can rest and relax while waiting for their entrances during performances. It is also the space where they meet the public if they so desire. At other times it acts as a ‘living room’ and lunchroom for the professional school.

**Occupancy**
Ring manager or assistant, artists.

**Space Adjacency**
- Proximity to backstage warm up space is desirable.
- Proximity to ring is desirable.
- Proximity to dressing rooms is desirable.

**Safety and Security**
- This space should be open and available to the artists at all times.
- Exit signs should be clearly visible.

**Design Qualities**
- This space should be designed to be relaxing and provide comfort to the artists.
- Views out would be desirable.

**Behavioral Qualities**
- This space should be relaxing – painted green.

**Acoustics**
- Sound absorptive acoustics (including carpet and upholstered seating).
- Background noise criteria rating of NC-35-40.

**Illumination**
- General lighting.

**HVAC**
- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.

**Furniture and Equipment**
- Lounge furniture, tables and chairs arranged to accommodate large and small groups.
- Full-length mirror.
- Kitchenette equipment (sink, microwave, refrigerator, and storage).
- Artist’s mailboxes.
- Bulletin board.
- Telephone.

**Special Needs**
- Call and talkback system outlet.
<table>
<thead>
<tr>
<th>Codes</th>
<th>SFBC, ADA</th>
</tr>
</thead>
</table>

**WORKSHOPS**

<table>
<thead>
<tr>
<th>FLOOR AREA</th>
<th>3 x 700sf</th>
</tr>
</thead>
</table>

**Activity Description**

This space contains a metal and a wood workshop for the production and repair of ring sets, props, and circus apparatus. Space is required to work on large and small objects made of wood, metal, paper, fabrics, papier mache, rubber, and plastics etc.

**Occupancy**

Artists, coaches, ring crew.

**Space Adjacency**

- Direct connection to loading dock is desirable.
- Direct connection to properties storage is required.
- Convenient path a travel to grand chapiteau through backstage warm up space is desirable.
- Safety training should be undergone for anyone using shop machines and safety notices should be posted as necessary.
- The spaces should be monitored when in use by those with less experience and should be locked when not in use.
- Sprinkler system should be installed.
- Adequate ventilation is required to prevent build-up of fumes.
- Lockable storage should be provided for smaller tools.

**Safety and Security**

The space should be designed using durable materials.

- Ample unobstructed floor area for moving large objects around machinery is necessary.
- This space should function when fully occupied but also be functional for a single user.
- Ample sound insulation is required.

**Design Qualities**

**Behavioral Qualities**

- General lighting but usually bright.
- In parts, tungsten should be used to match stage lighting.
- If there is day lighting it should be able to be blocked out.
- General thermal conditions, but forced air is not a good idea because of the amount of dust.
- Heavy exhaust system above machines, activated during work.
- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.
- Carpenter’s workbenches with stools.
- Dust extraction system.
- Pneumatic lines.
- Sink and basin.
- Shelves and cabinets.
- Assorted power and hand tools.
### Special Needs

- Potable water source.
- Ventilation is necessary to work with polystyrene.
- Large doors.

### Codes

- SFBC, ADA

### Properties Storage

<table>
<thead>
<tr>
<th>Floor Area</th>
<th>2500sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Description</td>
<td></td>
</tr>
<tr>
<td>This space is used for the storage of materials used in the creation of the ring properties and circus apparatus as well as properties and apparatus that have been made that are not currently in use.</td>
<td></td>
</tr>
<tr>
<td>Occupancy</td>
<td></td>
</tr>
<tr>
<td>Artists, coaches, ring crew.</td>
<td></td>
</tr>
<tr>
<td>Space Adjacency</td>
<td></td>
</tr>
<tr>
<td>Direct adjacency to the workshop is required.</td>
<td></td>
</tr>
<tr>
<td>Safety and Security</td>
<td></td>
</tr>
<tr>
<td>- Space should have secure lockers for expensive or dangerous properties.</td>
<td></td>
</tr>
<tr>
<td>- Doors should be lockable and accessible only to occupants.</td>
<td></td>
</tr>
<tr>
<td>Design Qualities</td>
<td></td>
</tr>
<tr>
<td>Organized.</td>
<td></td>
</tr>
<tr>
<td>Behavioral Qualities</td>
<td></td>
</tr>
<tr>
<td>Organized.</td>
<td></td>
</tr>
<tr>
<td>Acoustics</td>
<td></td>
</tr>
<tr>
<td>None.</td>
<td></td>
</tr>
<tr>
<td>Illumination</td>
<td></td>
</tr>
<tr>
<td>General lighting.</td>
<td></td>
</tr>
<tr>
<td>HVAC</td>
<td></td>
</tr>
<tr>
<td>- Humidity not to exceed 30%.</td>
<td></td>
</tr>
<tr>
<td>- Temperature to be 65-72 degrees F.</td>
<td></td>
</tr>
<tr>
<td>- 67% circulated air, 33% fresh air.</td>
<td></td>
</tr>
<tr>
<td>Furniture and Equipment</td>
<td></td>
</tr>
<tr>
<td>Storage racks, shelves, pipe frames, and cages.</td>
<td></td>
</tr>
<tr>
<td>Special Needs</td>
<td></td>
</tr>
<tr>
<td>Large doors.</td>
<td></td>
</tr>
<tr>
<td>Codes</td>
<td></td>
</tr>
<tr>
<td>SFBC, ADA</td>
<td></td>
</tr>
</tbody>
</table>

### Receiving/CRating Space

<table>
<thead>
<tr>
<th>Floor Area</th>
<th>600sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Description</td>
<td></td>
</tr>
<tr>
<td>This space is for the loading and unloading of delivery trucks, for materials in all areas of the circus building. Artists, coaches, and ring crew.</td>
<td></td>
</tr>
<tr>
<td>Occupancy</td>
<td></td>
</tr>
<tr>
<td>- Direct connection to the exterior at the loading platform level and street level is required.</td>
<td></td>
</tr>
<tr>
<td>- Convenient path of travel to the workshop and properties storage is required.</td>
<td></td>
</tr>
<tr>
<td>- Convenient path of travel to concessions and souvenir sales is desirable.</td>
<td></td>
</tr>
<tr>
<td>- Central location to all backstage spaces is desirable.</td>
<td></td>
</tr>
<tr>
<td>Safety and Security</td>
<td></td>
</tr>
<tr>
<td>All exterior doors should be fully secured.</td>
<td></td>
</tr>
<tr>
<td>Design Qualities</td>
<td></td>
</tr>
<tr>
<td>Clear floor and wall space.</td>
<td></td>
</tr>
<tr>
<td>Behavioral Qualities</td>
<td></td>
</tr>
<tr>
<td>Clear floor and wall space.</td>
<td></td>
</tr>
<tr>
<td>Acoustics</td>
<td></td>
</tr>
<tr>
<td>None.</td>
<td></td>
</tr>
<tr>
<td>Illumination</td>
<td></td>
</tr>
<tr>
<td>General lighting.</td>
<td></td>
</tr>
<tr>
<td>HVAC</td>
<td></td>
</tr>
<tr>
<td>- Humidity not to exceed 30%.</td>
<td></td>
</tr>
<tr>
<td>- Temperature to be 65-72 degrees F.</td>
<td></td>
</tr>
<tr>
<td>- 67% circulated air, 33% fresh air.</td>
<td></td>
</tr>
</tbody>
</table>
### Electric Shop

**Floor Area** 200sf

**Activity Description** This space is for the maintenance and repair of electrical and lighting, as related to the circus show as well as where the dimmers are located.

**Occupancy** Sound and lighting technicians.

**Space Adjacency** Proximity to the ring is desirable.

**Safety and Security** This space should be fully secure due to costly equipment storage.

**Design Qualities** Ample space for technicians to move around and store supplies.

**Behavioral Qualities** Acoustically isolated for dimmers, dimmer racks typically feature noisy cooling fans.

**Illumination** General lighting.

**HVAC** This space produces a large heating and cooling load at varied times that will have to be exhausted out by the HVAC system.

**Furniture and Equipment**

- Computer workstation and plotter.
- Flat files for lighting plans (30”x42”) and gel stock (52”x25”).
- Drafting table.
- Supply closet.
- Workbenches and stool.
- Storage for fixtures on 2” diameter bars.
- Color screen racks.
- Bulb, lighting cable, microphone, speaker, and sound cable storage.
- Dimmers on self-cooling racks.

**Special Needs** None.

**Codes** SFBC, ADA

### Sewing/Laundry Room

**Floor Area** 250sf

**Activity Description** This space is used for the care of costumes after they have started to be used in a production (costumes will be made off site).

**Occupancy** Artists and coaches.

**Space Adjacency** Proximity to the wardroom storage is desirable.

**Safety and Security** None.

**Design Qualities** Organized.

**Behavioral Qualities** Circulation around the space should be well planned.

**Acoustics** None.

**Illumination** Generally bright lighting.

**HVAC** Humidity not to exceed 30%.
### WARDROBE STORAGE

<table>
<thead>
<tr>
<th>FLOOR AREA</th>
<th>2000sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTIVITY DESCRIPTION</td>
<td>This space is used for the long-term storage of the costumes.</td>
</tr>
<tr>
<td>OCCUPANCY</td>
<td>Staff.</td>
</tr>
<tr>
<td>SPACE ADJACENCY</td>
<td>Proximity to the sewing/laundry room is desirable.</td>
</tr>
<tr>
<td>SAFETY AND SECURITY</td>
<td>Space should be generally secure.</td>
</tr>
<tr>
<td>DESIGN QUALITIES</td>
<td>Organized.</td>
</tr>
<tr>
<td>BEHAVIORAL QUALITIES</td>
<td>Organized.</td>
</tr>
<tr>
<td>ACOUSTICS</td>
<td>None.</td>
</tr>
<tr>
<td>ILLUMINATION</td>
<td>General lighting.</td>
</tr>
</tbody>
</table>
| HVAC | - Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.
- Ideally a dry cleaner like clothing storage system, otherwise double height clothing racks.
- Clothing racks. |
| FURNITURE AND EQUIPMENT | None. |
| SPECIAL NEEDS CODES | SFBC, ADA |
### 5.2.4 Training Spaces

The addition of training spaces allows the center to function both as a recreational center and a professional performance venue.

**MALE STUDENT LOCKER ROOM**

<table>
<thead>
<tr>
<th>Floor Area</th>
<th>750sf</th>
</tr>
</thead>
</table>

**Activity Description**

This space is for the students use to change from street clothes into practice attire, to lock up their possessions, and to shower after practicing.

**Occupancy**

Male professional artists and recreational students.

**Space Adjacency**

Proximity to the training spaces is desirable.

**Safety and Security**

- Entrances to this space should be monitored when in use by young children.
- Slip resistant flooring material should be used.
- Lockable lockers to secure student possessions.
- Partitions should be used at water closets and urinals for privacy.
- ADA accessible stall is required.

**Design Qualities**

- This space should appear clean and sterile at all times but still be aesthetically pleasing.
- All portions of this space should convey a feeling of privacy.
- Various sizes of lockers should be employed to accommodate a variety of storage needs.

**Behavioral Qualities**

- This space should be fully functional at peak periods.
- Adequate circulation must be included in front of lockers and around seating.

**Acoustics**

This space should be acoustically isolated.

**Illumination**

- Windows should be located with regard to height and arrangement of lockers.
- Lighting should be located at mirrors for grooming at over aisles and passages.

**HVAC**

- Space should be well ventilated.
- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.

**Furniture and Equipment**

- Individual lockers on raised base, stools, and fixed benches for 75 persons.
- Water closets, urinals, lavatories, and showers.
- Floors should be of impervious material, such as ceramic or quarry tile with a Carborundum impregnated surface, and should slope toward the drains. Concrete floors (no slip surface), if used, should be treated with a hardener to avoid penetration of odors and moisture.
- Walls should be of materials resistant to moisture and should have surfaces that are easily cleaned.
Ceilings in shower areas should be of ceramic tile or other material impervious to moisture and acoustically treated with material impervious to moisture and breakage.

Heavy-duty moisture resistant doors at entrances and exits should be equipped with corrosion resistant hardware.

All exterior corners should have rounded corners.

Entrance and exit doors should have vision barriers.

Circulation must accommodate ADA.

Some lockers must be wheelchair accessible.

Handrails must be provided in the ADA stall at 33” above floor.

Lavatory must be a maximum of 32” from the floor with an unobstructed knee clearance of 27” minimum.

**FEMALE STUDENT LOCKER ROOM**

**FLOOR AREA**

750sf

**ACTIVITY DESCRIPTION**

This space is for the students use to change from street clothes into practice attire, to lock up their possessions, and to shower after practicing.

**OCCUPANCY**

Female professional artists and recreational students.

**SPACE ADJACENCY**

Proximity to the training spaces is desirable.

**SAFETY AND SECURITY**

- Entrances to this space should be monitored when in use by young children.
- Slip resistant flooring material should be used.
- Lockable lockers to secure student possessions.
- Partitions should be used at water closets and urinals for privacy.
- ADA accessible stall is required.
- This space should appear clean and sterile at all times but still be aesthetically pleasing.
- All portions of this space should convey a feeling of privacy.
- Various sizes of lockers should be employed to accommodate a variety of storage needs.
- This space should be fully functional at peak periods.

**DESIGN QUALITIES**

- Adequate circulation must be included in front of lockers and around seating.
- This space should be acoustically isolated.
- Windows should be located with regard to height and arrangement of lockers.
- Lighting should be located at mirrors for grooming at over aisles and passages.

**BEHAVIORAL QUALITIES**

- Space should be well ventilated.
- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
Furniture and Equipment

- 67% circulated air, 33% fresh air.
- Individual lockers on raised base, stools, and fixed benches for 75 persons.
- Water closets, lavatories, and showers.

Special Needs

- Floors should be of impervious material, such as ceramic or quarry tile with a Carborundum impregnated surface, and should slope toward the drains. Concrete floors (no slip surface), if used, should be treated with a hardener to avoid penetration of odors and moisture.
- Walls should be of materials resistant to moisture and should have surfaces that are easily cleaned.
- Ceilings in shower areas should be of ceramic tile or other material impervious to moisture and acoustically treated with material impervious to moisture and breakage.
- Heavy-duty moisture resistant doors at entrances and exits should be equipped with corrosion resistant hardware.
- All exterior corners should have rounded corners.
- Entrance and exit doors should have vision barriers.
- Circulation must accommodate ADA.
- Some lockers must be wheelchair accessible.
- Handrails must be provided in the ADA stall at 33” above floor.
- Lavatory must be a maximum of 32” from the floor with an unobstructed knee clearance of 27” minimum.

Dance Studio

Floor Area

- 2000sf

Activity Description

This space is the practice area for dance routines. Professional and recreation students.

Occupancy

Proximity to first aid station and locker rooms is desirable.

Space Adjacency

Safety and Security

Floor should be smooth and free of obstructions. Space should be clean and free of distractions.

Design Qualities

Floor area should be free of obstructions. Acoustic separation is desirable.

Behavioral Qualities

Acoustics

Natural light is nice so long as it is high enough to not create a distracting view.

Illumination

HVAC

- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.

Furniture and Equipment

- Mirrors with curtains on all sides.
- Practice barres may be desired.

Special Needs

- None.

Codes

SFBC, ADA
### SMALL PRACTICE STUDIO

<table>
<thead>
<tr>
<th>Floor Area</th>
<th>1000sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Description</td>
<td>This space is a practice studio used mostly for contortionists and hand balancers; some low juggling can be done in here as well.</td>
</tr>
<tr>
<td>Occupancy</td>
<td>Professional and recreational students.</td>
</tr>
<tr>
<td>Space Adjacency</td>
<td>Proximity to first aid station and locker rooms is desirable.</td>
</tr>
<tr>
<td>Safety and Security</td>
<td>Floor mats to cushion floor.</td>
</tr>
<tr>
<td>Design Qualities</td>
<td>Space should be free of distractions.</td>
</tr>
<tr>
<td>Behavioral Qualities</td>
<td>Floor area should be free of obstructions.</td>
</tr>
<tr>
<td>Acoustics</td>
<td>None.</td>
</tr>
<tr>
<td>Illumination</td>
<td>Natural light is nice so long as it is high enough to not create a distracting view.</td>
</tr>
</tbody>
</table>
| HVAC | • Humidity not to exceed 30%.  
• Temperature to be 65-72 degrees F.  
• 67% circulated air, 33% fresh air. |
| Furniture and Equipment | Floor mats. |
| Special Needs | None. |
| Codes | SFBC, ADA |

### SMALL TRAPEZE STUDIO

<table>
<thead>
<tr>
<th>Floor Area</th>
<th>1000sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Description</td>
<td>This space is a practice studio with low trapezes for beginner and children’s work; some low juggling can be done here as well.</td>
</tr>
<tr>
<td>Occupancy</td>
<td>Professional and recreational students.</td>
</tr>
<tr>
<td>Space Adjacency</td>
<td>Proximity to first aid station and locker rooms is desirable.</td>
</tr>
</tbody>
</table>
| Safety and Security | • Floor mats to cushion floor.  
• Rigging for trapeze should be secure. |
| Design Qualities | Space should be free of distractions. |
| Behavioral Qualities | Floor area should be free of obstructions. |
| Acoustics | None. |
| Illumination | Natural light is nice so long as it is high enough to not create a distracting view. |
| HVAC | • Humidity not to exceed 30%.  
• Temperature to be 65-72 degrees F.  
• 67% circulated air, 33% fresh air. |
| Furniture and Equipment | Floor mats and static training trapezes. |
| Special Needs | None. |
| Codes | SFBC, ADA |

### RECREATIONAL GYMNASIUM

<table>
<thead>
<tr>
<th>Floor Area</th>
<th>1590sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Description</td>
<td>This space is a practice studio for the recreational classes needed more space such as tumbling.</td>
</tr>
<tr>
<td>Occupancy</td>
<td>Recreational students.</td>
</tr>
</tbody>
</table>
### SPACE ADJACENCY
Proximity to first aid station and locker rooms is desirable.

### SAFETY AND SECURITY
- Floor mats to cushion floor.
- Space should be free of distractions.

### DESIGN QUALITIES
- Space should be free of distractions.

### BEHAVIORAL QUALITIES
- Floor area should be free of obstructions.
- None.

### ACOUSTICS
- Natural lighting is desirable.

### ILLUMINATION
- None.

### HVAC
- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.
- Wall bars.
- Chalk bins.
- Flying trapeze rig.
- Wall mirrors.
- Floor mats.

### FURNITURE AND EQUIPMENT
- Wall bars.
- Chalk bins.
- Flying trapeze rig.
- Wall mirrors.
- Floor mats.

### SPECIAL NEEDS
Height must be no less than 15m (49’ 2.5’’), ideally 20m (65’ 7.5’’).

### CODES
SFBC, ADA

---

**MUSIC ROOM**

### FLOOR AREA
260sf

### ACTIVITY DESCRIPTION
This space is used by the orchestra to assemble prior to entering the orchestra stage/gallery before performances as well as to rehearse.

### OCCUPANCY
13 member or smaller orchestra.

### SPACE ADJACENCY
None.

### SAFETY AND SECURITY
- Space should be lockable and accessible only to occupants.

### DESIGN QUALITIES
- Space should be free of distractions.

### BEHAVIORAL QUALITIES
- Floor area should be free of obstructions.

### ACOUSTICS
- Acoustic isolation is important.
- Background noise criteria rating of NC-25-30.

### ILLUMINATION
- General lighting.

### HVAC
- HVAC should be silent.

### FURNITURE AND EQUIPMENT
- Chairs and music stands.
- Lockers for instruments.

### SPECIAL NEEDS
None.

### CODES
SFBC, ADA
5.2.5 Facility Support Spaces

Facility support spaces allow the center to operate a business with full time facilities for those in charge of the day-to-day operational business.

**RECEPTION**

<table>
<thead>
<tr>
<th><strong>FLOOR AREA</strong></th>
<th>100sf</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACTIVITY DESCRIPTION</strong></td>
<td>This space serves standard office reception functions such as greeting visitors, handling appointments, etc.</td>
</tr>
<tr>
<td><strong>OCCUPANCY</strong></td>
<td>Administration (1 full time desk staff person) and visitors.</td>
</tr>
</tbody>
</table>
| **SPACE ADJACENCY** | - Direct adjacency to offices is necessary.  
- Proximity to class/meeting rooms, office workroom/storage, and administrators’ green room is desirable. |
| **SAFETY AND SECURITY** | - It would be desirable for the receptionist to have views of all persons entering the building through the main entry.  
- Lockable storage for cash and valuables should be provided behind desk. |
| **DESIGN QUALITIES** | Views out would be desirable. |
| **BEHAVIORAL QUALITIES** | - This space should fulfill all programmatic needs of an office situation comfortably as well as making the visitor feel welcomed and attended to.  
- Adequate circulation should be provided for the staff behind the desk.  
- Adequate circulation should be provided in front of the reception desk. |
| **ACOUSTICS** | Background noise criteria rating of NC-35-40. |
| **ILLUMINATION** | - Natural light is desirable.  
- Task lighting should be provided at the reception desk. |
| **HVAC** | - Humidity not to exceed 30%.  
- Temperature to be 65-72 degrees F.  
- 67% circulated air, 33% fresh air.  
- Reception desk with computer and storage and soft secretarial chair. |
| **FURNITURE AND EQUIPMENT** | - Telephone.  
- Files.  
- Flexible seating for up to four waiting visitors. |
| **SPECIAL NEEDS** | None. |
| **CODES** | SFBC, ADA |

**CLASS/MEETING ROOMS**

<table>
<thead>
<tr>
<th><strong>FLOOR AREA</strong></th>
<th>1 x 300sf; 1 x 500sf</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACTIVITY DESCRIPTION</strong></td>
<td>These spaces are used for any general company meetings (staff, board of directors, and executive meetings), interviews for or by circus employees,</td>
</tr>
</tbody>
</table>
meetings with corporate or private patrons, and so on. The rooms will also be used as classrooms for sit-down classes (such as circus history) for the professional artists. Administration, coaches, artists.

**Space Adjacency**

Proximity to office spaces is desirable.

These spaces should be able to be fully locked because of AV equipment that may be stored in them.

**Design Qualities**

- Views out would be desirable.
- Space should be clean and not distracting.
- Adequate circulation should be provided around the table.
- Clear visibility should be provided for all people at the table.
- Views toward the screen are required.

**Behavioral Qualities**

- This space should fulfill all programmatic needs of an office situation comfortably as well as allow for some expansion.

**Illumination**

- General florescent lighting with dimming system.
- Natural lighting with blinds capable of blocking out light when using projector would be desirable.

**HVAC**

- Humidity not to exceed 30%.
- Temperature to be 65-72 degrees F.
- 67% circulated air, 33% fresh air.

**Furniture and Equipment**

- Soft chairs on castors and meeting table.
- A/V equipment including projector on a mobile table.
- Built in projector screen and whiteboard.

**Special Needs Codes**

None.

**Codes**

SFBC, ADA

**Offices**

**Floor Area**

3 x 150sf; 7 x 60sf

This space is general office of the administration of the circus including bookkeeping, accounting, and marketing. Some employees may have their own offices while others will work in a common space.

**Occupancy**

10 administrators, typically full-time professional employees.

**Space Adjacency**

- Direct adjacency to the reception is necessary.
- Nearyness to the office workroom/storage, class/meeting rooms, and administrators’ green room is desirable.

**Safety and Security**

- Private offices should have doors locks; all workstations should have at least one lockable drawer.
- Lockable file cabinets can secure documents.

**Design Qualities**

Views out would be desirable.

This space should fulfill all programmatic needs of an office situation comfortably as well as allow for some expansion.
### Interpersonal Interactions in the New Circus

| **ACOUSTICS** | • Background noise criteria rating of NC-30-35 in private offices and NC-35-40 in open plan offices.  
• Carpet and upholstered seating should be used to reduce decibel levels. |
| **ILLUMINATION** | • Natural light is desirable.  
• Task lighting should be provided over work surfaces.  
• General fluorescent lighting without bright spots. |
| **HVAC** | Operable windows are desirable.  
• Workstations (adjustable height work surface desk with computer, telephone, and desk chair) for 10 employees (various sizes by status).  
• Guest chairs.  
• Filing cabinets. |
| **FURNITURE AND EQUIPMENT** | • Workstations (adjustable height work surface desk with computer, telephone, and desk chair) for 10 employees (various sizes by status).  
• Guest chairs.  
• Filing cabinets. |
| **SPECIAL NEEDS CODES** | None. |
| **CODES** | SFBC, ADA |

### OFFICE WORKROOM/STORAGE

| **FLOOR AREA** | 150sf |
| **ACTIVITY DESCRIPTION** | This room is designated for sorting mail, sending mail out, copying, and storing supplies and old files.  
Administration. |
| **OCCUPANCY** | Administration. |
| **SPACE ADJACENCY** | Nearness to offices, reception, and class/meeting rooms is desirable. |
| **SAFETY AND SECURITY** | Sensitive files should be kept in locked file cabinets. |
| **DESIGN QUALITIES** | Organized. |
| **BEHAVIORAL QUALITIES** | Organized. |
| **ACOUSTICS** | Background noise criteria rating of NC-35-40.  
Natural light is not necessary. |
| **ILLUMINATION** |  
• Humidity not to exceed 30%.  
• Temperature to be 65-72 degrees F.  
• 67% circulated air, 33% fresh air. |
| **HVAC** |  
• Copier, fax, and phone (must be located clear of any obstructions).  
• Shelves and flat files for storage. |
| **FURNITURE AND EQUIPMENT** | None. |
| **SPECIAL NEEDS CODES** | SFBC, ADA |

### ADMINISTRATOR’S GREEN ROOM

| **FLOOR AREA** | 300sf |
| **ACTIVITY DESCRIPTION** | This is the space where employees can rest and relax during the workday (such as at lunch).  
Administration and coaches. |
| **OCCUPANCY** | Administration and coaches. |
| **SPACE ADJACENCY** | Proximity to office spaces is desirable. |
| **SAFETY AND SECURITY** | This space should be open and available to the administration at all times. |
| **DESIGN QUALITIES** | This space should be designed to be relaxing and provide comfort to the administration. |
| **BEHAVIORAL QUALITIES** | This space should be relaxing – painted green. |
### Interpersonal Interactions in the New Circus

**Background noise criteria rating of NC-30-35.**

**Natural lighting is desirable.**

**Humidity not to exceed 30%.**

**Temperature to be 65-72 degrees F.**

**67% circulated air, 33% fresh air.**

**Lounge furniture, tables and chairs.**

**Kitchenette equipment (sink, microwave, refrigerator, and storage).**

**Employees’ mailboxes.**

**Bulletin board.**

**Telephone.**

**Call and talkback system outlet.**

**Ring monitor system speaker.**

**Telephone outlet.**

**SFBC, ADA**

### PUBLIC TOILETS

- **Floor area:** 2 x 100sf

- **Activity description:** These two stall toilet rooms are for the use of anyone in the public areas.

- **Occupancy:** All users.

- **Space adjacency:** None.

- **Safety and security:** Individual water closet stalls should have latch locks.

- **Design qualities:** Each space within the space should convey a sense of privacy.

- **Behavioral qualities:** None.

- **Acoustics:** Acoustic isolation is desirable.

- **Illumination:** General lighting.

- **HVAC:** Humidity not to exceed 30%.

- **Temperature to be 65-72 degrees F.**

- **67% circulated air, 33% fresh air.**

- **Furniture and equipment:** 2 toilets, 2 lavatories, full-length mirror, waste bin.

- **Special needs:** Should be near to a drinking fountain (which must be in compliance with ADA).

- **Finishes should be durable materials that can handle wet conditions.**

- **Handrails provided in ADA stall should be placed at 33” above floor.**

- **Accessible lavatory must be placed a maximum of 32” from the floor with unobstructed knee clearance of 27” minimum.**

- **Codes:** SFBC, ADA

### GENERAL STORAGE

- **Floor area:** 1000sf

- **Activity description:** This space is for the storage of items that do not directly apply to the other storage spaces provided.

- **Occupancy:** Male professional artists and recreational students.
<table>
<thead>
<tr>
<th><strong>SPACE ADJACENCY</strong></th>
<th>None.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SAFETY AND SECURITY</strong></td>
<td>This space should be fully able to be locked.</td>
</tr>
<tr>
<td><strong>DESIGN QUALITIES</strong></td>
<td>Organized.</td>
</tr>
<tr>
<td><strong>BEHAVIORAL QUALITIES</strong></td>
<td>Floor area should be free of obstructions.</td>
</tr>
<tr>
<td><strong>ACOUSTICS</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>ILLUMINATION</strong></td>
<td>General lighting.</td>
</tr>
<tr>
<td><strong>HVAC</strong></td>
<td>- Humidity not to exceed 30%.</td>
</tr>
<tr>
<td></td>
<td>- Temperature to be 65-72 degrees F.</td>
</tr>
<tr>
<td></td>
<td>- 67% circulated air, 33% fresh air.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>FURNITURE AND EQUIPMENT</strong></th>
<th>Shelves and cabinets.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPECIAL NEEDS</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>CODES</strong></td>
<td>SFBC, ADA</td>
</tr>
</tbody>
</table>

**JANITOR’S CLOSET/STORAGE**

<table>
<thead>
<tr>
<th><strong>FLOOR AREA</strong></th>
<th>2 x 50sf</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACTIVITY DESCRIPTION</strong></td>
<td>This space is provided for the general upkeep and sanitation of the building.</td>
</tr>
<tr>
<td><strong>OCCUPANCY</strong></td>
<td>Janitorial staff.</td>
</tr>
<tr>
<td><strong>SPACE ADJACENCY</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>SAFETY AND SECURITY</strong></td>
<td>This space should be fully able to be locked.</td>
</tr>
<tr>
<td><strong>DESIGN QUALITIES</strong></td>
<td>Organized.</td>
</tr>
<tr>
<td><strong>BEHAVIORAL QUALITIES</strong></td>
<td>Organized.</td>
</tr>
<tr>
<td><strong>ACOUSTICS</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>ILLUMINATION</strong></td>
<td>General lighting.</td>
</tr>
<tr>
<td><strong>HVAC</strong></td>
<td>- Humidity not to exceed 30%.</td>
</tr>
<tr>
<td></td>
<td>- Temperature to be 65-72 degrees F.</td>
</tr>
<tr>
<td></td>
<td>- 67% circulated air, 33% fresh air.</td>
</tr>
<tr>
<td></td>
<td>- Mop sink.</td>
</tr>
<tr>
<td></td>
<td>- Storage space for janitorial equipment and restroom paper supplies.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>FURNITURE AND EQUIPMENT</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPECIAL NEEDS</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>CODES</strong></td>
<td>SFBC, ADA</td>
</tr>
</tbody>
</table>
### 5.3 Program Summary

<table>
<thead>
<tr>
<th>room name</th>
<th># of rooms</th>
<th>sq. footage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FRONT OF HOUSE SPACES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vestibule</td>
<td>1</td>
<td>2,000</td>
</tr>
<tr>
<td>foyer</td>
<td>1</td>
<td>24,000</td>
</tr>
<tr>
<td>male patron restroom</td>
<td>2</td>
<td>300</td>
</tr>
<tr>
<td>female patron restroom</td>
<td>2</td>
<td>500</td>
</tr>
<tr>
<td>box office</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>coat check</td>
<td>1</td>
<td>1,250</td>
</tr>
<tr>
<td>concession sales</td>
<td>2</td>
<td>500</td>
</tr>
<tr>
<td>souvenir sales</td>
<td>2</td>
<td>500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>31,000</strong></td>
</tr>
<tr>
<td><strong>GRAND CHAPITEAU</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ring</td>
<td>1</td>
<td>1,452</td>
</tr>
<tr>
<td>seating</td>
<td>1</td>
<td>16,000</td>
</tr>
<tr>
<td>orchestra stage/gallery</td>
<td>1</td>
<td>260</td>
</tr>
<tr>
<td>sound booth</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>lighting booth</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>ring manager’s office</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>18,262</strong></td>
</tr>
<tr>
<td><strong>BACK OF HOUSE SPACES</strong></td>
<td></td>
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</tr>
<tr>
<td>backstage warm-up space</td>
<td>1</td>
<td>1,452</td>
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<tr>
<td>backstage toilets</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>first aid station</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>single occupancy dressing rooms</td>
<td>2</td>
<td>150</td>
</tr>
<tr>
<td>small multiple occupancy dressing rooms</td>
<td>2</td>
<td>250</td>
</tr>
<tr>
<td>large multiple occupancy dressing rooms</td>
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<td>700</td>
</tr>
<tr>
<td>artists’ green room</td>
<td>1</td>
<td>1,500</td>
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<tr>
<td>workshops</td>
<td>3</td>
<td>700</td>
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<tr>
<td>properties storage</td>
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<td>2,500</td>
</tr>
<tr>
<td>receiving/crating space</td>
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<td>600</td>
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<tr>
<td>electric shop</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>sewing/laundry room</td>
<td>1</td>
<td>250</td>
</tr>
<tr>
<td>wardrobe storage</td>
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<td>2,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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<tr>
<td><strong>TRAINING SPACES</strong></td>
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<tr>
<td>male student locker room</td>
<td>1</td>
<td>750</td>
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<tr>
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<td>1</td>
<td>750</td>
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<tr>
<td>dance studio</td>
<td>1</td>
<td>2,000</td>
</tr>
<tr>
<td>small practice studio</td>
<td>1</td>
<td>1,000</td>
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<tr>
<td>small trapeze studio</td>
<td>1</td>
<td>1,000</td>
</tr>
<tr>
<td>recreational gymnasium</td>
<td>1</td>
<td>1,590</td>
</tr>
<tr>
<td>music room</td>
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<td>260</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>7,350</strong></td>
</tr>
<tr>
<td><strong>FACILITY SUPPORT SPACES</strong></td>
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<td>100</td>
</tr>
<tr>
<td>small class/meeting room</td>
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<td>300</td>
</tr>
<tr>
<td>large class/meeting room</td>
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<td>500</td>
</tr>
<tr>
<td>private offices</td>
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<td>150</td>
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<tr>
<td>open plan offices</td>
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<td>60</td>
</tr>
<tr>
<td>office workroom/storage</td>
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<td>150</td>
</tr>
<tr>
<td>administrator’s green room</td>
<td>1</td>
<td>300</td>
</tr>
<tr>
<td>public toilets</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>general storage</td>
<td>1</td>
<td>1,000</td>
</tr>
<tr>
<td>janitor’s closet/storage</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>2,770</strong></td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td></td>
<td><strong>72,534</strong></td>
</tr>
</tbody>
</table>

<p>| mechanical spaces                          | 10,880.1   |
| circulation                                | 7,253.4    |
| <strong>TOTAL</strong>                                  | <strong>90,667.5</strong>|</p>
<table>
<thead>
<tr>
<th>Room Type</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior</td>
<td>x</td>
</tr>
<tr>
<td>vestibule</td>
<td>x</td>
</tr>
<tr>
<td>foyer</td>
<td>x</td>
</tr>
<tr>
<td>male patron restroom</td>
<td>x</td>
</tr>
<tr>
<td>female patron restroom</td>
<td>x</td>
</tr>
<tr>
<td>box office</td>
<td>x</td>
</tr>
<tr>
<td>coat check</td>
<td>x</td>
</tr>
<tr>
<td>concession sales</td>
<td>x</td>
</tr>
<tr>
<td>souvenir sales</td>
<td>x</td>
</tr>
<tr>
<td>Fmg</td>
<td>x</td>
</tr>
<tr>
<td>seating</td>
<td>x</td>
</tr>
<tr>
<td>orchestra stage/gallery</td>
<td>x</td>
</tr>
<tr>
<td>sound booth</td>
<td>x</td>
</tr>
<tr>
<td>lighting booth</td>
<td>x</td>
</tr>
<tr>
<td>ring manager's office</td>
<td>x</td>
</tr>
<tr>
<td>backstage warm-up space</td>
<td>x</td>
</tr>
<tr>
<td>backstage toilets</td>
<td>x</td>
</tr>
<tr>
<td>first aid station</td>
<td>x</td>
</tr>
<tr>
<td>single occupancy dressing rooms</td>
<td>x</td>
</tr>
<tr>
<td>small multipurpose dressing rooms</td>
<td>x</td>
</tr>
<tr>
<td>large multipurpose dressing rooms</td>
<td>x</td>
</tr>
<tr>
<td>artists' green room</td>
<td>x</td>
</tr>
<tr>
<td>workshops</td>
<td>x</td>
</tr>
<tr>
<td>property storage</td>
<td>x</td>
</tr>
<tr>
<td>receiving/creating space</td>
<td>x</td>
</tr>
<tr>
<td>electric shop</td>
<td>x</td>
</tr>
<tr>
<td>leasing/laundry room</td>
<td>x</td>
</tr>
<tr>
<td>wardrobe storage</td>
<td>x</td>
</tr>
<tr>
<td>male student locker room</td>
<td>x</td>
</tr>
<tr>
<td>female student locker room</td>
<td>x</td>
</tr>
<tr>
<td>dance studio</td>
<td>x</td>
</tr>
<tr>
<td>small practice studio</td>
<td>x</td>
</tr>
<tr>
<td>small trapeze studio</td>
<td>x</td>
</tr>
<tr>
<td>recreational gymnasium</td>
<td>x</td>
</tr>
<tr>
<td>music room</td>
<td>x</td>
</tr>
<tr>
<td>reception</td>
<td>x</td>
</tr>
<tr>
<td>class/meeting rooms</td>
<td>x</td>
</tr>
<tr>
<td>offices</td>
<td>x</td>
</tr>
<tr>
<td>office/workroom/storage</td>
<td>x</td>
</tr>
<tr>
<td>administrators' green room</td>
<td>x</td>
</tr>
<tr>
<td>public toilets</td>
<td>x</td>
</tr>
<tr>
<td>general storage</td>
<td>x</td>
</tr>
<tr>
<td>assistant's closet/storage</td>
<td>x</td>
</tr>
</tbody>
</table>
Interpersonal Interactions in the New Circus

Bibliography


