



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

**INTERNATIONAL JOURNAL  
OF CURRENT RESEARCH**

*International Journal of Current Research*  
Vol. 13, Issue, 10, pp.19078-19083, October, 2021

DOI: <https://doi.org/10.24941/ijcr.42314.10.2021>

## RESEARCH ARTICLE

# TRANSPARENT GLASS FLOOR USER RESPONSE (CASE STUDY IN PLAZA FX JAKARTA)

**\*Tunjung Atmadi**

Interior Design Department, Faculty of Design and Creative Arts, Universitas Mercu Buana

### ARTICLE INFO

#### Article History:

Received 29<sup>th</sup> July, 2021  
Received in revised form  
27<sup>th</sup> August, 2021  
Accepted 15<sup>th</sup> September, 2021  
Published online 30<sup>th</sup> October, 2021

#### Key Words:

Application, Floor, Glass,  
Transparent, Safe, Comfort.

#### \*Corresponding author:

*Alimjanova Kholishon Alimjanovna*

### ABSTRACT

Along with the development of science, the glass is now used as the main structural element that carries the burden of the structure and used on the floor as an element of forming space. The application of a transparent glass floor does not cover a whole room, just in the upper part of the room with a view of the floor below. In this research, the author wants to know the response from the user at the time of crossing the transparent glass floor at Plaza FX Jakarta. Activities across the floor from the glass material need courage because the user still assumes material form glass not safety in application. The presence of glass as the floor is still considered risk. Especially many people assume the glass has a more than potential hazard, even though the material transparent glass the floor is from a type of laminate. This is interesting from this research because it is necessary to prove laminated glass as a structural element capable of making safe, comfortable, and own styles in the appearance of the interior design. This research used method is a case study, where the data collected through participant observation, interviews, etc. For explain, the condition learned through "Field Study" or "case report" in the social behavior of the society that is seen as they are obtained in the field. The result of this study are expected, can give experience to society there is no need to afraid of crossing the floor from glass materials. Because of the transparent glass floor can provide a sense of safety, comfort, and own uniqueness psychological.

Copyright © 2021. Tunjung Atmadi. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Tunjung Atmadi. "Transparent glass floor user response (case study in plaza fx jakarta)", 2021. *International Journal of Current Research*, 13, (10), 19078-19083.

## INTRODUCTION

Along with development science and technology, glass is utilized as the main element in building structures. The architects and interior design choose glass as a part of the building's interior design. Although in the application using glass it still requires other supporting elements as frames and reinforcement. Until a few years ago, walking on the glass was something that was impossible or very scary and dangerous to do. But with sophisticated technology has developed a new type of glass that is suitable for glass floors in interior design. Transparent glass floor will make the room view more spacious and open. The floor of glass material also allows more light to enter and make the atmosphere of the room milder. The application transparent glass floor does not cover overall the room, just in specific parts of the room. The chosen material of the floor must also be considered, the glass should be proper from the side of the thickness because of consideration of the type of glass can hold the load in the installation, not do above the massive plate. Besides being strong when choosing a load, you also consider the glass condition.

Not be allowed to choose a glass floor with slippery tendencies because it will endanger a user, choose structured ones. Glass can make a room to be unique. Exploration of glass material is needed so the atmosphere of the room becomes very distinctive. The application of transparent glass floor does not cover overall of the room, just in specific parts of the room. Choosing the material of the floor should also correctly consider, the glass should be proper from the side of thickness, the shape and also frame dimension, because of consideration the type of glass can also hold the load in the installation not doing above the massive plate. Besides strong while choosing a load of glass needed consideration condition of glass. Not be allowed to choose glass floor with slippery tendency because it will endangered user's, choose a structured one. The glass can make the room will be unique. Exploration of glass material is needed so that the atmosphere of the space becomes very distinctive. The presence of glass as a floor is still considered risky. Most people agree that the glass chooses more dangerous potency. Shards of glass regardless of its form can injure the human body.

The other side, the benefits of glass as the material finishing of the floor made a modern atmosphere in a room. Using transparent glass as a floor, ease for people to see at the bottom of the room, thus giving the impression of floating space. The atmosphere of space can be created the result of the physical components of the interior, and the activities of visitors/users therein with accompanying social interactions. This atmosphere will be stimulant for behavior visitors/users become part of the atmosphere of the space itself. As a stimulant, the atmosphere of the space formed will be an influence perception, cognition, and motivation process in personality system, then make a response to the atmosphere of the space embodied by the behavior of visitors/users.

## METHODS

The method used in this research is the case study. Case studies research is a study that explores a problem with detailed limitations, has in-depth data collection, and includes various sources of information. This research is limited by time and place, and the cases studied are programs, events, activities or individual. Based on the opinion of Creswell (2007) explaining the process of research of case studies in a simpler and more practical way, is as follows:

- The first stage the researcher has to do is determine whether the case research approach to be used is in accordance with the research problem.
- The researcher identified the case to be examined. The case is in the form of an individual, some individuals, a program, an event or an activity.
- Do an analysis of the case. Through data collection, a detailed description will emerge from the study of researchers on history, the chronology of the occurrence of cases, or a description of activities from day to day from the case.
- As the final stage of interpretive analysis, researchers report meanings that can be learned, both learning about the issues behind the cases carried out through instrumental case research (instrumental case research), as well as learning from unique conditions or rarely carried out through case study research depth (intrinsic case study research).

## RESULTS AND DISCUSSION

### Result



Source: Doc. FX Plaza

Figure 1. The transparent glass floor



Source: Doc. FX Plaza

Figure 2. The transparent glass floor

Research with the case studies method aims to get visitor/user response when crossing the transparent glass floor at Plaza FX Jakarta with various style and behavior visitor/user. The user of transparent glass floor at first was to attract visitor, start from design until support facilities. Design using a transparent glass floor is very interesting from the side of Interior Design. However, observations remain to be done based on the style and behavior of visitors when crossing above the transparent glass floor. The results of observations conducted by researchers in the field for two months as follows:

### Tables Field observations

NO	Visiting time	To	VISITORS	M/F	Age	Observation result		
7	17/4/2016 pk. 20.00 - 20.30	2	Head of family	M	45 thn	Hold on		
			Wife	F	42 thn	Shocked, hold on		
			Son	F	12 thn	Run		
					Son	M	10 thn	Run
		3	Teenager	M	21 thn	Ordinary road		
			Teenager	M	20 thn	Ordinary road		
			Teenager	F	18 thn	Ordinary road		
			Teenager	F	17 thn	Ordinary road		
			Teenager	M	19 thn	Ordinary road		
			Teenager	M	20 thn	Ordinary road		
			Teenager	F	16 thn	Ordinary road		
			Teenager	F	15 thn	Ordinary road		
		3	Employee	M	30 thn	Quiet road		
			Employee	F	30 thn	Quiet road		
			Employee	M	30 thn	Quiet road		
Employee	M		25 thn	Quiet road				
Teenager	M		21 thn	Ordinary road				
Teenager	M		20 thn	Ordinary road				
			Teenager	F	18 thn	Hold on		
			Teenager	F	17 thn	Hold on		
			Teenager	F	19 thn	Hold on		
			Teenager	M	20 thn	Ordinary road		

NO	Visiting time	To	VISITORS	M/F	Age	Observation result		
2	13/3/2016 pk. 20.00 - 20.15	3	Head of family	M	45 thn	Hold on		
			Wife	F	42 thn	Shocked, hold on		
			Son	F	12 thn	Run		
					Son	M	10 thn	Run
		2	Head of family	M	24 thn	Quiet road		
			Wife	F	22 thn	Hold on		
			Son	M	4 thn	Sleeping pushchair		
			Son	M	18 thn	Quiet road		
		1	Head of family	M	45 thn	Quiet road		
			Son	F	20 thn	Quiet road		
			Son	M	18 thn	Quiet road		
			5	Teenager	M	17 thn	Ordinary road	
				Teenager	M	18 thn	Ordinary road	
				Teenager	F	15 thn	Ordinary road	
				Teenager	F	15 thn	Ordinary road	
Teenager	M			19 thn	Ordinary road			
Teenager	M			20 thn	Ordinary road			
Teenager	F			15 thn	Ordinary road			
5	Teenager		F	15 thn	Ordinary road			
	Teenager	M	25 thn	Quiet road				
	Teenager	F	23 thn	Quiet road				
5	Teenager	M	49 thn	Ordinary road				

NO	Visiting time	To	VISITORS	M/F	Age	Observation result		
3	20/3/2016 pk. 17.00 - 17.29	2	Teenager	M	19 thn	Run		
		Teenager	M	19 thn	Run			
		Teenager	M	18 thn	Run			
		Teenager	F	17 thn	Hold on			
		Teenager	F	16 thn	Shaking road			
		Teenager	F	17 thn	Shaking road			
		Teenager	F	18 thn	Shaking road			
		Teenager	M	20 thn	Quiet road			
		1	Head of family	M	22 thn	Quiet road		
		Wife	F	22 thn	Hold on			
		2	Head of family	M	35 thn	Jalan cepat		
		Wife	F	30 thn	Hold on			
		Anak	M	12 thn	Shaking road			
		1	Head of family	M	25 thn	Quiet road		
		Wife	F	21 thn	Shocked, hold on			
		6	Employee	M	35 thn	Ordinary road		
		Employee	M	38 thn	Ordinary road			
		Employee	M	38 thn	Ordinary road			
		Employee	F	36 thn	Ordinary road			
		Employee	F	32 thn	Shaking road			
		Employee	F	34 thn	Ordinary road			
		Employee	F	31 thn	Shocked, hold on			
		Employee	M	31 thn	Ordinary road			
		4	27/3/2016 pk. 11.00 - 12.05	2	Employee	F	45 thn	Laugh
				2	Employee	F	40 thn	Quiet road
				1	Head of family	M	25 thn	Quiet road
Wife	F			21 thn	Shaking road			
1	Lansia			M	65 thn	Shaking road		
Lansia	F			64 thn	Shaking road			
Teenager	M			22 thn	Laugh			
2	Employee			F	36 thn	Run		
1	Head of family			M	25 thn	Run		
Wife	F			21 thn	Shaking road			
3	Teenager			M	18 thn	Hold on		
Teenager	F			17 thn	Hold on			
Teenager	F			16 thn	Ordinary road			
Teenager	F			17 thn	Ordinary road			
Teenager	F			18 thn	Ordinary road			
Teenager	M			20 thn	Ordinary road			
1	Head of family			M	55 thn	Quiet road		
Wife	F			51 thn	Shaking road			
4	Head of family			M	25 thn	Ordinary road		
Wife	F			24 thn	Ordinary road			
3	Head of family			M	40 thn	Run		
Wife	F			35 thn	Shaking road			
Son	F			15 thn	Run			
2	Head of family			M	25 thn	Run		
Wife	F			21 thn	Shocked, hold on			
5	Employee			M	25 thn	Laugh		
Employee	F	23 thn	Hold on					
NO	Visiting time	To	VISITORS	M/F	Age	Observation result		
5	10/4/2016 pk. 14.45 - 15.10	3	Teenager	M	21 thn	Ordinary road		
		Teenager	M	20 thn	Ordinary road			
		Teenager	F	18 thn	Hold on			
		Teenager	F	17 thn	Hold on			
		3	Head of family	M	46 thn	Shaking road		
		Wife	F	43 thn	Shaking road			
		3	Head of family	M	27 thn	Ordinary road		
		Wife	F	24 thn	Ordinary road			
		1	Employee	M	24 thn	Ordinary road		
		Employee	F	22 thn	Shaking road			
		2	Employee	M	25 thn	Laugh		
		Employee	M	25 thn	Laugh			
		Employee	F	23 thn	Shaking road			
		Employee	F	32 thn	Shaking road			
		3	Teenager	M	21 thn	Ordinary road		
		Teenager	M	20 thn	Ordinary road			
		Teenager	F	18 thn	Ordinary road			
		Teenager	F	17 thn	Ordinary road			
		Teenager	M	19 thn	Ordinary road			
		Teenager	M	20 thn	Ordinary road			
		Teenager	F	16 thn	Hold on			
		Teenager	F	15 thn	Hold on			
		5	Teenager	M	19 thn	Ordinary road		
		Teenager	M	20 thn	Ordinary road			
		Teenager	F	19 thn	Ordinary road			
		NO	Visiting time	To	VISITORS	M/F	Age	Observation result
6	10/4/2016 pk. 20.30 - 20.45	3	Ka. Keluarga	M	49 thn	Ordinary road		
		Wife	F	45 thn	Hold on			
		Son	F	22 thn	Hold on			
		Son	M	17 thn	Shaking road			
		1	Head of family	M	55 thn	Ordinary road		
		Wife	F	52 thn	Hold on			
		Son	F	25 thn	Hold on			
		Son	M	23 thn	Shaking road			
		Son	F	22 thn	Hold on			
		Son	M	22 thn	Lari			
		2	Employee	M	24 thn	Ordinary road		
		Employee	F	22 thn	Shaking road			
		1	Employee	M	25 thn	Shaking road		
		2	Employee	M	20 thn	Shaking road		
		3	Teenager	M	20 thn	Ordinary road		
		Teenager	M	20 thn	Ordinary road			
		Teenager	F	20 thn	Ordinary road			
		1	Lansia	M	65 thn	Shaking road		
		Lansia	F	64 thn	Hold on			
		Teenager	M	25 thn	Hold on			
		Teenager	M	23 thn	Laugh			
		Teenager	M	17 thn	Run			
		3	Head of family	M	51 thn	Hold on		
		Wife	F	46 thn	Hold on			
		Grandchild	F	10 thn	Hold on			
		Grandchild	F	8 thn	Hold on			
Grandchild	M	12 thn	Hold on					

NO	Visiting time	To	VISITORS	M/F	Age	Observation result
7	17/4/2016 pk. 20.00 - 20.30	2	Head of family	M	45 thn	Hold on
		Wife	F	42 thn	Shocked, hold on	
		Son	F	12 thn	Run	
		Son	M	10 thn	Run	
		3	Teenager	M	21 thn	Ordinary road
		Teenager	M	20 thn	Ordinary road	
		Teenager	F	18 thn	Ordinary road	
		Teenager	F	17 thn	Ordinary road	
		Teenager	M	19 thn	Ordinary road	
		Teenager	M	20 thn	Ordinary road	
		Teenager	F	16 thn	Ordinary road	
		Teenager	F	15 thn	Ordinary road	
		3	Employee	M	30 thn	Quiet road
		Employee	F	30 thn	Quiet road	
		3	Employee	M	30 thn	Quiet road
		3	Employee	M	25 thn	Quiet road
		6	Teenager	M	21 thn	Ordinary road
		Teenager	M	20 thn	Ordinary road	
		Teenager	F	18 thn	Hold on	
Teenager	F	17 thn	Hold on			
Teenager	F	19 thn	Hold on			
Teenager	M	20 thn	Ordinary road			



Figure 3. Walk holding hands

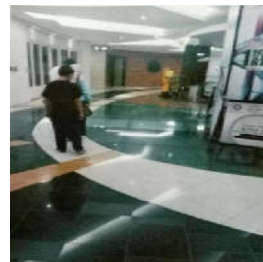


Figure 5. Silent looking down(correction)

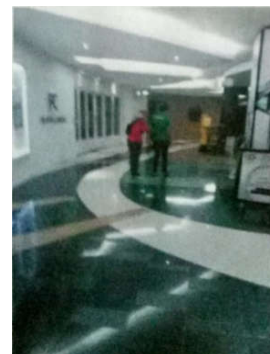


Figure 6. Silent looking down(correction)



Figure 7. Afraid of heights(correction)



Figure 11. Walk quietly(correction)

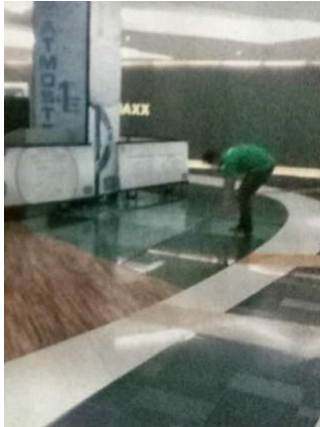


Figure 8. Afraid of heights(correction)

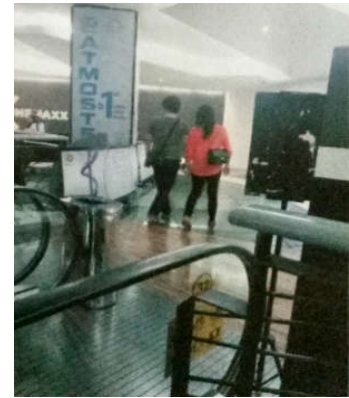


Figure 12. Walk quietly(correction)



Figure 9. Detour(correction)



Figure 13. Shock and afraid(correction)



Figure 10. Detour(correction)



Figure 14. Shock and afraid(correction)



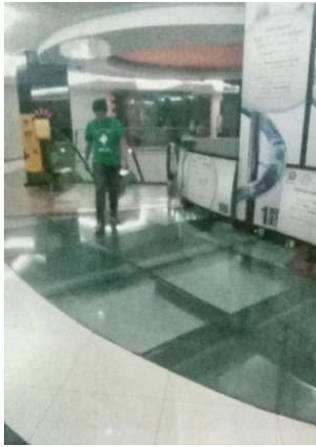


Figure 15. Walk trembling and squat (correction)

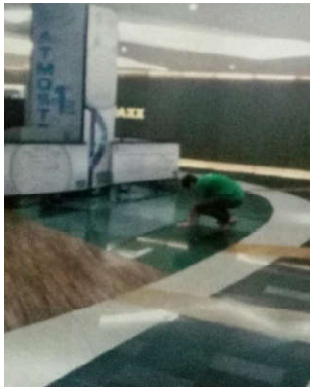


Figure 16. Walk trembling and squat (correction)



Figure 17. Walk fast and run (correction)

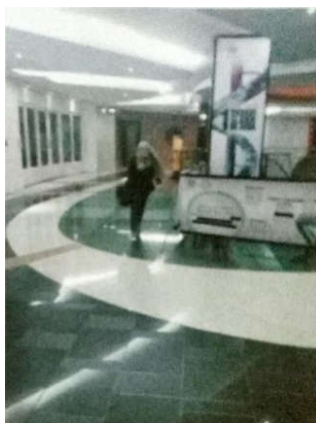


Figure 18. Walk fast and run (correction)

## DISCUSSION

In this case studies, the researcher gets an initial experience when seeing visitors crossing the transparent glass floor of a mall in Jakarta. Human activity as a user whether it is male or female, old or young, at the time crossing on the transparent glass floor will get a very diverse experience. The sensation of walking on the transparent glass floor make our adrenaline go up to wherever it is. Especially for people have a phobia of high (Acrophobia) will be an extraordinary challenge. The sensation of fear when crossing on the transparent glass floor worth it with the experience gained. Based on field observation data, there are many expressions shown by users/visitors when crossing it. Indeed there are some who are not afraid, but there are also those who are nervous, shocked, silent and some even dance cheerfully like there is no fear barrier. So it's natural that there are hysterical mothers and children when they stand on the transparent glass floor when they are grounded standing on the glass floor. But there are many children who are happy when they are on the transparent glass floor, by doing activities as if seeing the atmosphere and playing with friends downstairs. It was a very thrilling experience for users/visitors who crossed the transparent glass floor when suddenly they were already on the glass floor. Predictably, the visitor is a visitor who first visited the plaza. Whereas more than one visit, the experience is different, they are more relaxed when crossing the translucent glass floor.

Based on the above, it can be analyzed as follows:

- For teenagers under 15 years old, they are happy to be on the glass floor, they are not afraid, even running around, as if the glass floor is a play area for them.
- For adolescents 16 to 22 years old, there are those who are afraid to stand on the glass floor, there are those who trembling and hold hands with their friends, but there are also those who are relaxed and walk with normality.
- For ages 23 to 40 years, they vary in behavior. Some walked by holding on, afraid to walk, walk while laughing, brisk walking and detouring avoiding the transparent glass floor.
- For ages 40 and the elderly, they tend to walk slowly while avoiding the transparent glass floor.
- From observations made, according to the circulation path provided by the mall manager, users/visitors will pass through the transparent glass floor. But there are also those who deliberately avoid turning through other trajectories. Please note that transparent glass floor has the main function, which is as pedestrian pedestal so as to provide comfort when passing on it, in addition to providing aesthetic value to its interior design.

The application of a transparent glass floor has not been widely applied in public areas because it can have a psychological impact on mall users/visitors, ranging from fun, fear, anxiety, and others. From the above, the advantages and disadvantages of using the translucent glass floor are as follows:

- The floor is a grounding base in a building which is an element that forms space are very important for doing activities on it.
- The use of glass for the floor can give the impression of luxury and elegance. With a standardized structure, the

glass used is laminate-double glass, which is definitely safe to use for floor material.

- Safety, because broken glass would not injure, can give protection because broken glass still sticks on PVB.
- As heat controller and sun glare, and able to provide light properties in buildings.
- Can provide a direct view below it.
- The weakness is giving fear when crossing it, giving a sense of uncomfortable despite the high aesthetic.

## CONCLUSION

### Conclusion

The application of glass in the building now is not just like a window and a door which function to deliver sunlight into the room. Nor it is for cover high building, but now the use of glass is more development in the area of architecture and interior. Apart from all its beauty, the glass still has a breakable value, so that currently it is not maximized to be used as a building structure. However, the glass is still needed in the building. Although in the development of technology to overcome the glass is easily broken can minimalize with adding specific chemical material. That means now can create various type of glass, to make more varied in the use and application of the architecture and interior. As the type of laminated glass that can be applied as a floor and it turns out that applications on transparent glass material on the floor giving very interesting experiences for research material. Useful for science, especially architecture and interior design.

### Suggestion

**The results obtained in this study are expected to be used, among others:**

- To complete the theoretical and practical studies in Design.

- As consideration for teaching staff in the interior design in an effort to improve design disciplines.
- As a contribution of ideas for improving learning outcomes and improving the quality of education especially for students of Faculty of Design and Creative Arts Universitas MercuBuana.

## REFERENCES

- Creswell, J. W. 1998. *Qualitatif Inquiry and Research Design*. Sage Publications, Inc: California.
- Cowan, Henry & Peter R Smith. 1988. *The Science and Technology of Building Materials*, New York.
- DK.Ching, Francis. 2010. "Arsitektur: Bentuk, Ruang dan Tatanan" Terjemahan. Jakarta: Erlangga.
- Dahliwal, A., & Hay, J. N. 2002. The characterization of polyvinylbutyral by thermal analysis. *Thermochimica Acta* 391, 245–25.
- Deddy Halim. 2005. *Psikologi Arsitektur*. PT Grasindo: Jakarta.
- Joyce Marcella Laurens, 2004. *Arsitektur dan Perilaku Manusia*, Jakarta: PT Grasindo,
- Jensen, Klaus Bruhn and Nicholas W. Jankowski. (1991). *A Hand Book of Methodologies For Mass Communication research*.
- Mulyana, Deddy. 2001. *Metodologi Penelitian Kualitatif: Paradigma Baru Ilmu Komunikasi dan Ilmu Sosial Lainnya*. Bandung: PT remaja Rosdakarya.
- Yuli.S. Andyono, 2006. "Indonesia Shopping Centres" Penerbit: Griya Asri Prima

\*\*\*\*\*