

# Railing Safety

## Introduction

The existing link-bridges behind the level 1 main food court were constructed above a service road. These link-bridges provide the connectivity for staff, patient and visitor between KKH building and the public bus-stop. However, the existing railings of the link-bridges were installed with horizontal balustrade. These potentially serves as climbing bars for the children and exposing them to risk of falling from height.

## Aim

To prevent the children from climbing over the link-bridge railing and fall off the ledge.

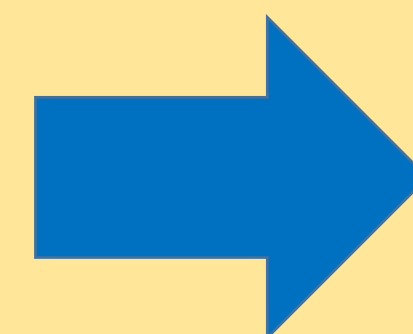
## Methodology

### PLAN

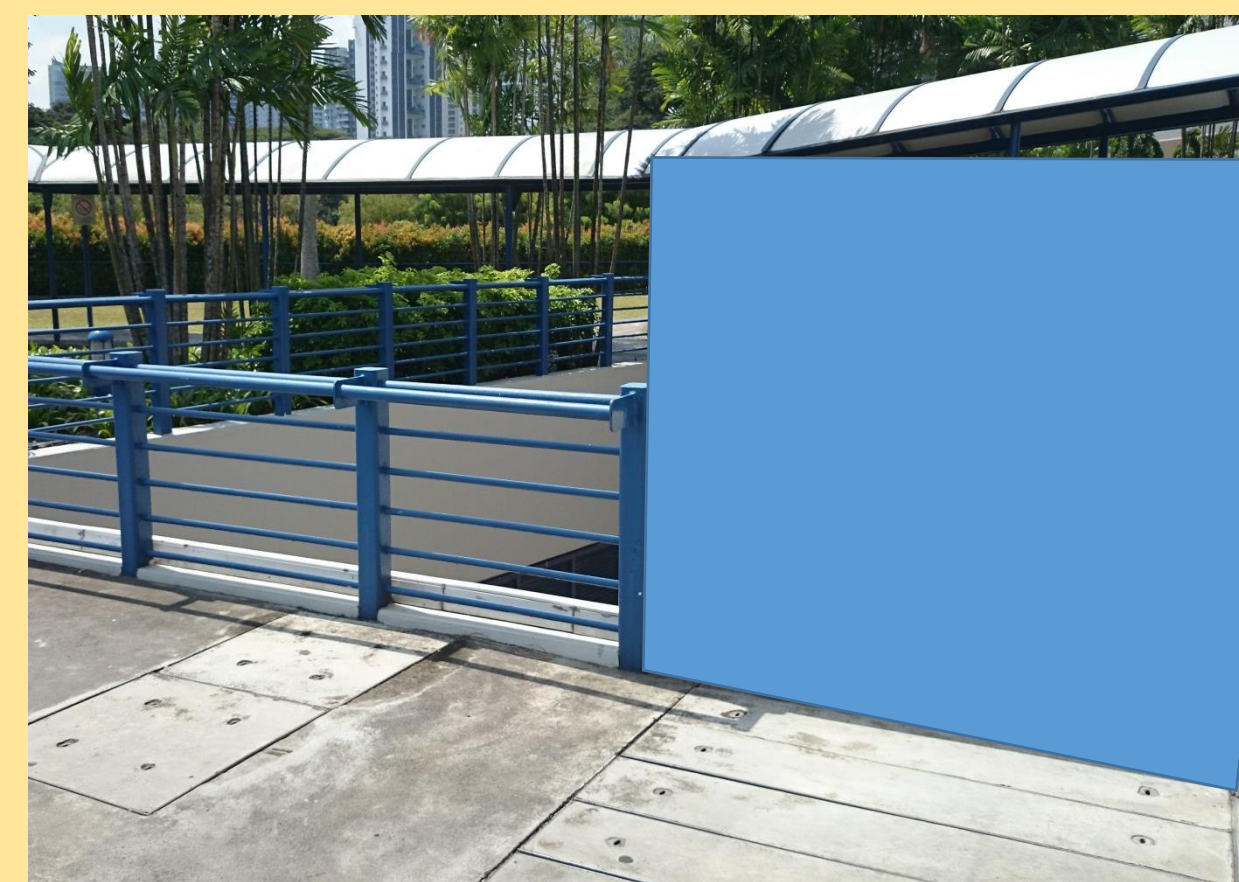


Existing railings were installed with horizontal balustrade. (A potential climbing element for children) The link-bridges over-look the service drive-way at Basement 1.

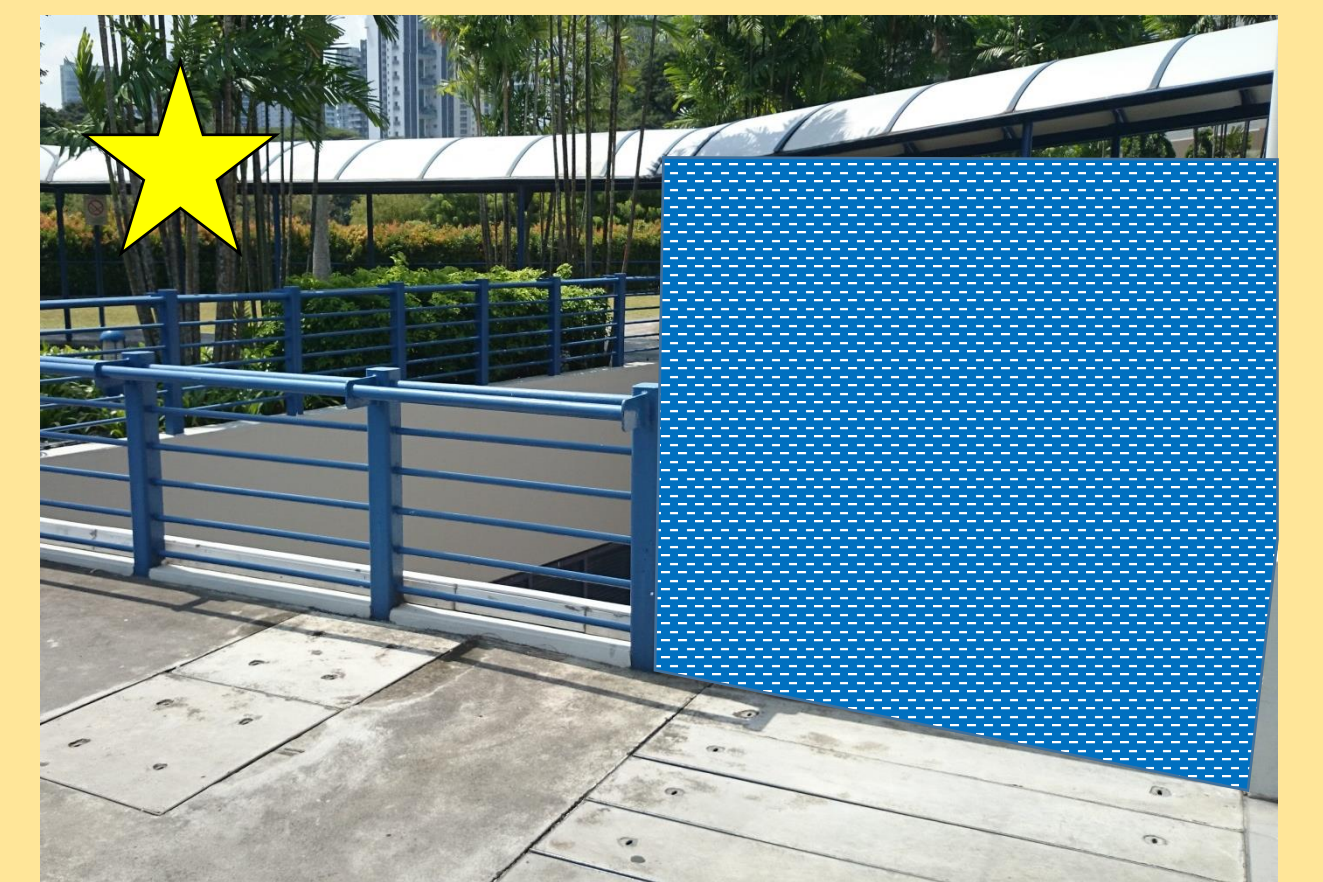
Falling from this height will cause serious injuries. Thus, there is a need to remove this potential hazard.



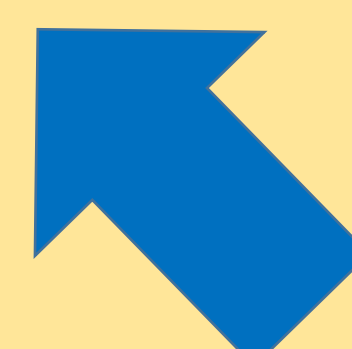
### DO



Option 1  
To install 1.8m solid panel to cover over existing railing. To prevent the children from reaching the horizontal bars. But this will make the link- bridges dark.



Option 2  
To install 1.8m perforated panel to cover over existing railing. This prevent the children from reaching the horizontal bars. Link-bridges will not be completely dark as light can pass through.



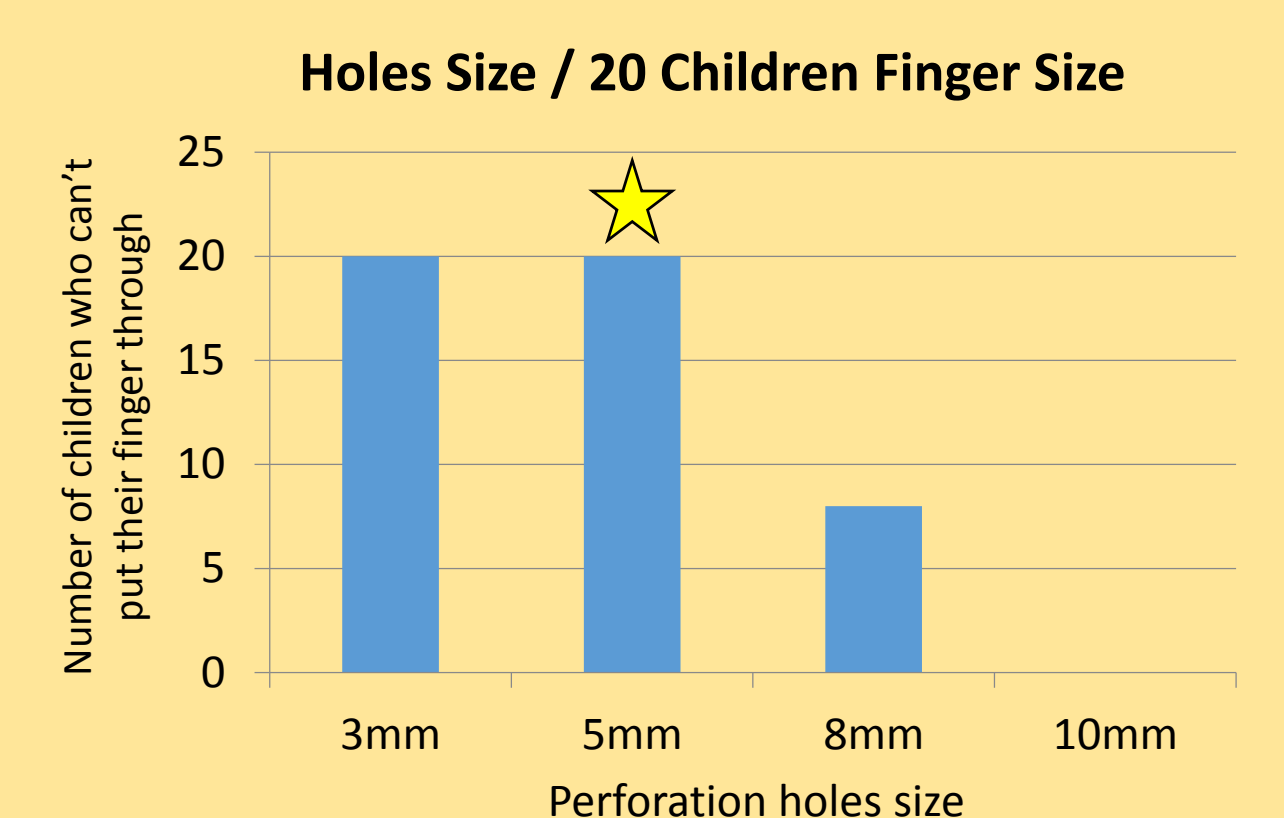
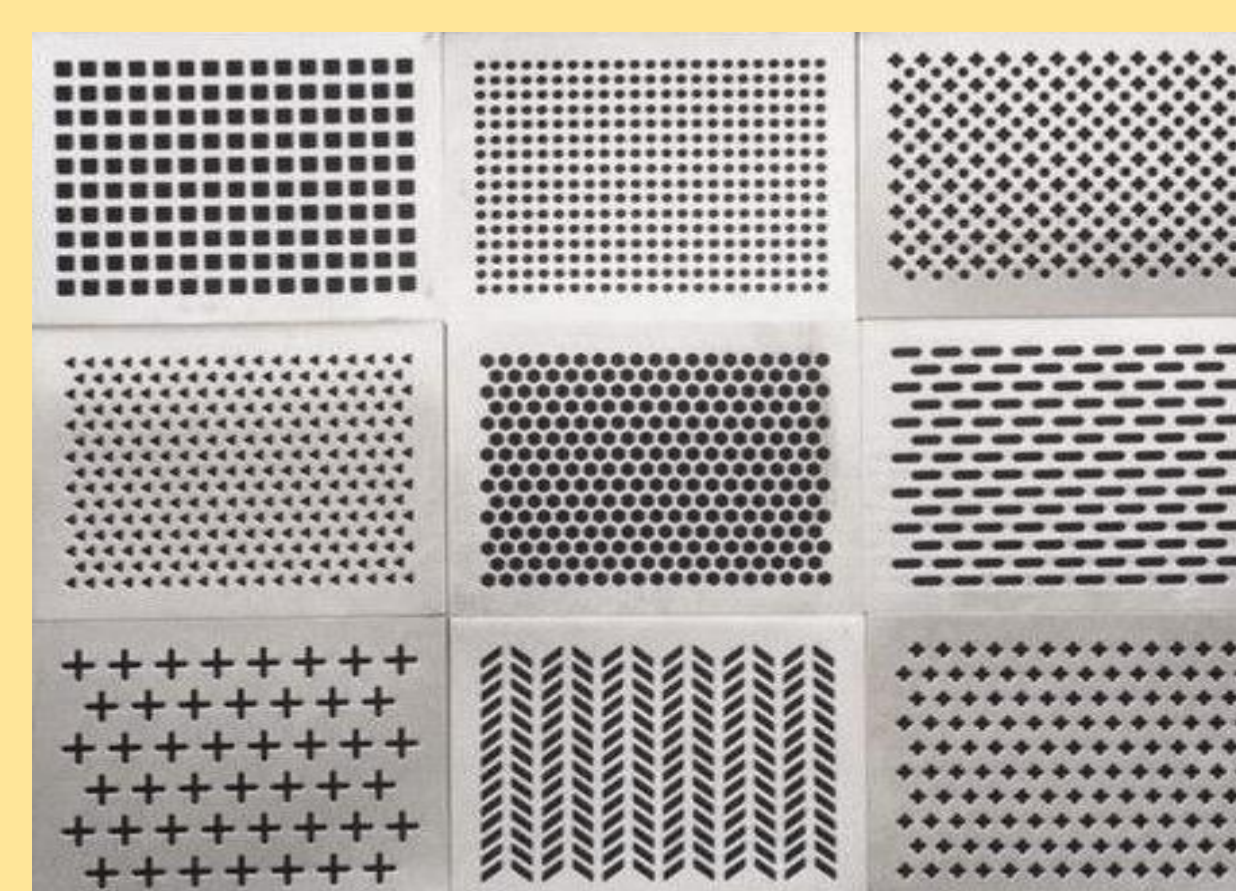
### ACTION



1. Take measurement of existing railing.
2. Explore method to secure and install.
3. Selection of appropriate material.
4. Cordon off the link-bridge during installation.



### CHECK



## Result

1. Children are not seen climbing over the railing and playing at the building ledge after the installation.
2. Prevent fall from height which may sustain injury or fatal.

## Conclusion

The solution provided a safe and secured link-bridge for use by patient, staff and visitors.

Pre-construction risk management and Enterprise Risk Management were conducted. Additionally, there are considerations on the size of the perforated hole.

1. Cleaning concern – Holes cannot be too small or else it will trap dust and difficult to clean.
2. Safety concern – Holes cannot be big where children finger may get stuck in it or too big where children will be able to climb on it.