

Horizontal Shore (metal)

Scope

This document details the method of construction of a metal (Paratech) horizontal shore, and describes the capacity and limitations of use.

Description

The horizontal shore is a metal shore consisting of two timber wall plates with metal struts used to provide the load bearing capacity between them.

Use

- Stability: Class 2 shore
- This shore is used to transfer loads between vertical structures and to maintain a safe means of egress along corridors. The depth of the wall plates will depend on the structure being supported.

Construction – Components

All timber is C16 Grade or higher structural timber. All dimensions are nominal.

Wall plates	Must be a minimum of 100mm x100mm x length required
Metal struts	As required
Extensions	As required
Base plates	As required, fixed or 20° swivel
Cross bracing	150mm x 50mm x length required
Nails and fixings	As required

Construction – Assembly

1. Survey area and determine the best way to mitigate the hazard and damage.
2. Clear debris from the area to be shored.
3. Measure the space to be shored.
4. Cut wall plates to size.
5. Select appropriate metal struts and extensions.
6. Select appropriate base plates.
7. Construct the shore as much as possible in a safe area.
8. Erect the shore in the predetermined spot.
9. Add cross bracing from wall plate to wall plate.
10. Secure the shore using appropriate fixings.

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Capacity and Limitations

- The capacity of the shore will be determined by the number, type and length of struts that are used, and the bearing area of the timber/base plate connection.
- Shorers should always work to the 4:1 scale when determining the struts that are required to safely support the load.
- The stability of the shore depends on its connections to the walls
- The two types of strut (Grey and Gold) can be used side by side in the same shore but should not be used together in the same strut. When this is the case then the load bearing capacity of the shore must be worked out using the least capacity strut.
- Maximum extensions permitted:
 - Grey – 2 extensions to a maximum of 900mm
 - Gold – 1 extension
- The distance between the strut and the end of the wall plates should be a maximum of 450mm and a minimum of 300mm.
- The distance between struts will depend on the load being supported and the dimensions of the timber being used for the wall plates.
- The load must be supported as gently as possible. On no account should the shore have a pushing effect on the structure.
- Shores must be checked periodically during operations to ensure they are still fulfilling their function.
- This equipment should only be operated by suitably trained personnel.

Variations

- If access is required it may be possible, after consulting an engineer, to modify or omit the cross bracing.

***Cross bracing
omitted for clarity***

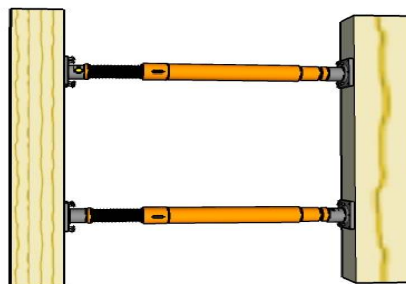


Figure 1 [SOP_SHO019]

References

Paratech Manual

Author – K Morrison

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