

# Heavy Element Handling - e.g. Glass Screens

## The Problem/Challenge

To install heavy glass screens that are specifically required by the designer and client and need to be brought into the building and located by other than manual handling methods.

## The Risks

If these heavy elements are not identified or eliminated early the installation methods may not be adequately planned or costed. Higher risk manual handling may occur. Alternatively expensive additional hoisting methods may have to be added to the contract costs at a late stage.

## The Solution

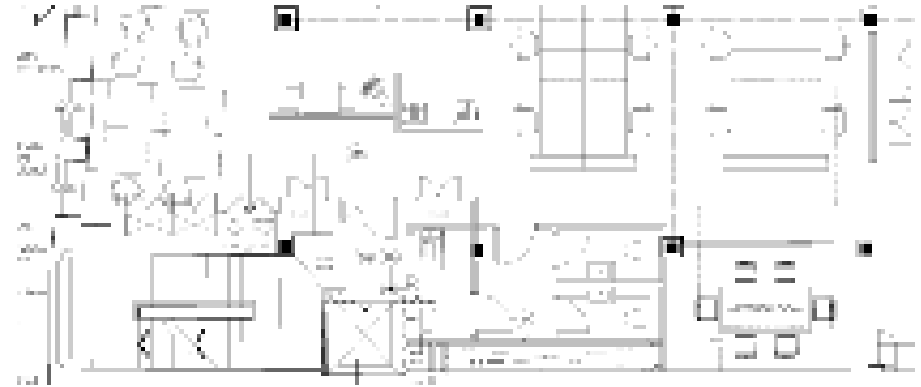
The team investigated the feasibility of substituting lighter materials, for instance smaller components that can be demounted and re-assembled on site. This was not acceptable to the client. The position of the heavy elements was identified at tender stage and their access route indicating vertical and horizontal transportation routes and methods.

## The Benefits

This allowed the contractor, client and designer to recognise and react to the key heavy lifting issues. Mechanical aides used to transport the screens.

## Key Points

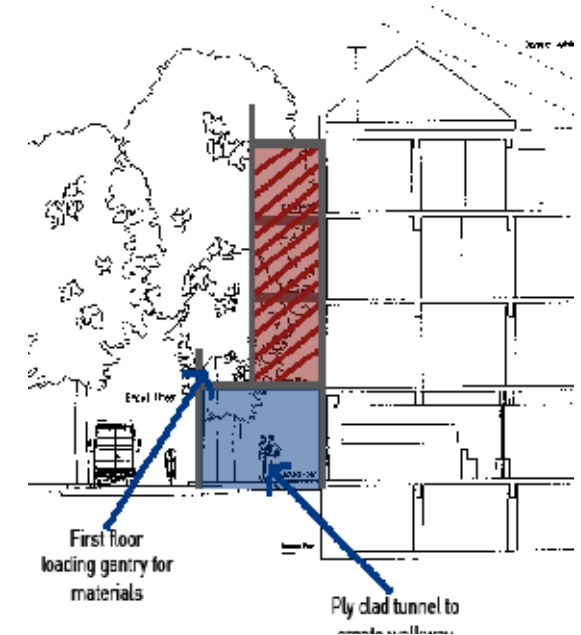
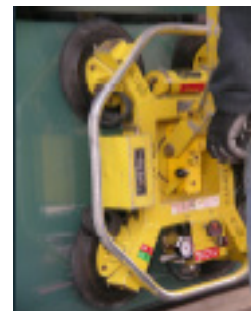
- Consider substitution for lighter or smaller elements.
- Use drawings to identify areas where heavy components are located by simple symbols.
- Look carefully at component access routes.
- Consult contractor or specialist lifting and equipment contractors and request proposals at tender. Think about future replacement access.



Acceptable access route shown and final locations



Mechanical aides



Vertical access route