
Risk Element

- Collapse of Ceiling Panel;
- Falling from Height;
- Struck by Falling Object;
- Slips, Trips and Falls;
- Danger to Third Parties;
- Contact with Cold Surfaces;
- Confined space;
- Lone Working.

Precautions to Eliminate/reduce Risk

- Work on these panels should be carefully planned and thoroughly risk assessed before undertaking any works;
- All composite panels should be considered as non-load bearing;
- When planning work activities on composite panels reference any site inspection reports to ascertain the age and condition of the panels;
- Adhere to any guidance in the panel inspection reports;
- Visually Inspect the condition of the panels prior to working;
- A good level of lighting is to be maintained;
- Where there is evidence of damage/delaminating (panel flexing) cordon off the area and warning signs to be displayed;
- Report any Defects Real or Suspected to:
 - Manager;
 - Supervisor;
 - Site;
 - Other Personnel working in the area.
- Limit the loading on individual panels;
- Ensure spreader boards are used prior to using ladders / steps;
- Adopt good Housekeeping techniques;
- Information and Instruction to be given prior to working on ceilings;
- Access and Egress Route must be maintained and adhere to the specific sites permit to work procedures.

Safe Working Method

Panel Construction

- Typically, injected under pressure a rigid foam core sandwiched and auto adhesively welded/fixated between two exterior skins of galvanised sheet steel;
- Earlier construction methods were rigid insulation boards with galvanised steel glued onto top and underside;
- Insulation materials for cold stores are usually polyurethane (PIR) and some earlier sites, polystyrene.

Panel Support Structure

- Panels are of a tongue and groove or other locking manufacture along the length;
- The ends fit into inverted 'T' bars, which are supported via threaded rods from either roof purling's or secondary steel;
- The tensile strength of the panels, the locking mechanisms and support steelwork gives the ceiling its overall capacity to support weight;
- Wherever possible, keep to designated walkways and platforms;
- Do not congregate on one panel in groups of more than 2 persons;
- Excess stress loading by impact, running, jumping, heavy stepping, dropping tools, dropping materials etc.;
- Panels must not be overloaded. The panels are designed for access and limited loads, they are not to be considered as a working platform for loading out, carrying or positioning equipment;
- Do not carry steel pipes, cables or other heavy items of equipment across panels without having placed Youngman type walk boards or plywood sheeting in position first, which must span the support system;
- Excess stress/damage by point loading, ladders and steps - Board it out to spread the point of contact;
- Mobile scaffolding, Risk assessment needed for point loading and overweight;
- Damage by chemicals i.e. thinners, acetone, solvents, always report spillages and use correct procedures and PPE to clean up after a spill;
- Damage by water and ice absorption (Over weight). Clean up any liquid spillages immediately, report any signs of ice build-up / vapour seal breakdown;
- Damage by foot traffic (delaminating of metal skin from insulation). All thoroughfares or areas of repeated foot traffic should have a protective walkway. Any delaminating should be reported immediately;
- All plant and equipment (cables ducts etc) should be supported independently from the main steel work and not hung or laid directly on the panels;
- The cutting penetrations within ceiling panels should be completed by a competent panel contractor;
- Care should be taken to avoid walking too closely to the edge of penetrations through ceiling panels;
- No hot works or hot appliances, welding or cutting gear or chemical processes to be carried out on ceiling panels without a permit to work and adequate controls & protection;
- Any damage caused to ceiling panels to support system should be reported immediately to avoid risk of collapse of the panels and harm to personnel;
- Always remember, when working on 'Cold Store Ceilings' you are 'Working at Height'.

This page intentionally blank.