

GHOSTING – THERMAL BRIDGING



Description: Darker areas / spots showing up on the surface following the framing lines behind. Above Left photo, wall framing showing up and Right photo, fixing head areas showing through the polystyrene cladding.

Probable Cause/s: Ghosting (thermal bridging) is caused by either the frame work or fixings (nails/screws) being colder the surrounding surface due to a heat sink affect. The immediate underlying area is less insulated compared to the area directly next to it. This can cause damp air to condense on the colder area (above frames/fixing heads) that are colder. The result being darker areas that follow the patterns of the framing. As you can see above, you can see the heads of the fixings in the polystyrene sheets under the plaster which, because they are metal, are even colder and more prone to becoming a condensing surface. This is seen on exterior cladding just as much as interior linings. Typically, the condensation can cause more dirt's to adhere to the surface and more surface moisture, causing a colour change, thus creating irritating lines or spots on the surface.

Prevention: Follow correct building / cladding and fixing guide lines. To reduce ghosting on inside surfaces, eliminate indoor air particulates e.g. stop burning candles, coal/firewood or incense and control relative humidity (inside) to maintain below 60 % during the colder months of the year.

Remedy: If staining is developing in larger patterns this indicates the wall or ceiling may not be insulated correctly or the fixings need to be insulated with special insulation plugs. The repair in any case will require that the wall or ceiling is opened-up and insulated in a better way using certified builders/plasters who understand the issue.



Master Painters NZ Association Po Box 40 355 Upper Hutt 5045 – PH 04 472 5870

Email masterpainters@masterpainters.nz www.masterpainters.co.nz