

Top 10 risks to avoid when procuring and installing fire resistant drylining.

Designing procuring and constructing drylining is complicated and detailed, it needs to be done by people who are competent and designed by people who have full knowledge of what it is required to do and what it will interface with, as well as what will penetrate it.

This is particularly true where any type of performance is required: fire resistance, sound insulation, wind loadings, robustness and if it is likely to encounter moist or humid environments.

The top 10 things that may result in a non-compliant installation are:

1. **Swapping manufacturers plasterboards or components**, on face may appear compliant, but without test evidence of compliance it may not be compliant.
2. **Using different screws or different screw centres than recommended by the system owner.**
Screws are an integral part of the system, and the manufacturers* system should be procured and installed as a complete system to be compliant.
3. **Assuming that all systems are constructed in the same way**, they are not and can't be. Each manufacturer will test their systems independently of others and may differ in fundamental details such as openings and deflection heads as examples.
4. **Assuming that a skim coat negates the need to tape and fill the joints** where recommended. All systems are tested to achieve a required performance and any deviation from the system tested details are likely to make the installation non-compliant.
5. **Assuming the size and proximity of the builders' work openings without checking with the system owners.** Prepared openings for service penetrations are likely to be restricted to a certain maximum size, maximum proximity from other holes, doors, soffits and junctions.
6. **Assuming the size and proximity of the door openings and the door weight, can be achieved** without further intervention and without checking with the system owners. The size and weight of a door leaf can be excess of tested systems and can require additional steels to support the weight leading to a knock-on consequence for fire protection of the supporting steel.
7. **Assuming that all plasterboards can be installed horizontally.** Unless the manufactures systems have compliant evidence, all plasterboard should be installed vertically.
8. **Failing to observe the correct method to install the insulation between the boards where required.** Insulation is installed to provide acoustic performance and enhanced thermal insulation. Failure to install the insulation correctly can lead to a loss of performance.
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9. Failing to stagger the boards and board joints.

All plasterboards should be staggered from face to face and in the case of double boarding and two lifts the boards should be staggered against the internal layer of plasterboard to maintain the required performance.

10. Failing to install a flat plate or noggin at

horizontal board joints as recommended by the system owner when they are required to meet the manufactures recommendations will result in a non compliant installation.

In addition don't **Install drylining when the site isn't watertight**, which is unfortunately a common practice. It runs the risk of plasterboards getting wet and as there is no evidence of compliance if boards get wet it requires replacement of the boards and possibly any insulation and frames.

In simple terms forewarned is forearmed, so always.

- Check what the specification says including workmanship.
- Check that any changes are recorded and approved
- Photograph and record the build in stages.

*Note the manufacture refers to who puts the system on the market including the person or organisation who specifies or procures the components from separate sources on the assumption of performance.