

MPS Plaster Supply

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HOW BEST TO CREATE CURVED INTERNAL FEATURE LININGS

IS THE USE OF FLEXIBLE PLASTERBOARD OR A PRECAST PLASTER MOULDING PREFERRED FOR:

- CURVED WALLS AND CORNERS
- CURVED CEILING FEATURES, SUCH AS COVED AND OVOLU CORNICE, PELMETS, BULKHEADS AND ARCHES
- CURVED CLADDING FOR COLUMNS?

WHICH IS THE MORE COST-EFFECTIVE OPTION?

1. FLEXIBLE PLASTERBOARD

All major plasterboard manufacturers – BGC, CSR, Boral and Knauf – offer a similar flexible board with the specification:

- 6.5mm thickness
- 1200 x 3600 RE sheet size only.

All product documentation claims an easy, quick installation with the underlying assumption that the use of flexible plasterboard saves time and money.

That is it's use is cost effective. Can this be substantiated?

Consider the following possible limitations:

- The minimum curvature for a convex installation is 250R
- The minimum curvature for a concave installation is 450R
- To achieve a smooth curve (i.e. no 'flats') extensive frame work is recommended, viz.

(a) Use of Rondo Flexi-Trak, Studco Ezytrack or similar.

(b) Convex stud centres at 125 for 250R (12 studs per 90 degree corner) and 200 for 450R (9 studs per 90 degree corner).

(c) Concave stud centres at 150 for 450R (10 studs per 90 degree corner and 200 for 650R (9 studs per 90 degree corner).

(d) 2 layers of 6.5mm plasterboard are required.

(e) Installations are non-fire rated.*

(f) Extensive fixings (screws) required because of substantial stressing of the flexiboard.

*See, for instance, CSR Gyprock specification: 'Fire rated walls MUST NOT be curved to a radius of less than 3000mm.'

The promotional support documentation refers to 'easy' installation. But substantial labour hours must be involved. There is no mention of labour cost.

So, how cost effective really is the use of flexible plasterboard?

2. PRECAST PLASTERGLASS MOULDINGS

Before the development of flexible plasterboard one of the traditional approaches to curved features was to use a precast plaster curved or profiled moulding. This remains an option in many instances where the cost of the mould can be recovered in the tendered price of the project.

Consider the following:

- The mould cost is a 'one-off'; typically, in the range \$1000 to \$2000 for each individual curve.
- The installation framework is straightforward; a stud at the joint location and nominal 450 stud centres for all styles of curvature.
- There is no internal stress associated with a moulding.
- Mouldings can be supplied in any thickness to match the adjoining plasterboard, i.e., 10, 13 or 16mm.
- Mouldings can be made to a specified length and have edge trowel recesses incorporated in the design.
- Installation labour costs are minimised. A degree of skill is required for jointing of a plasterglass moulding to conventional plasterboard.
- When incidental damage occurs the repair is straightforward and well within the capability of most plasterers. (Compare this with a highly stressed flexible plasterboard installation where damage in the worst case may require the full replacement of the feature.)

CONCLUSION

The comparative costs of the two above options is essentially dependent on the number or lineal metres requiring a curved cladding. The more to be clad the more the analysis favours a moulding.

For a single, one-off feature the use of flexible plasterboard may be preferred.

But consider the following.

MPS Plaster has access to a large number of standard moulds for past features supplied to the industry, such as;

- External 90-degree corner moulds, some with straight side extensions of 100 – 200mm. (Range 15R to 600R.)
- Internal 90-degree corner moulds as above. (Range 15R to 1500R.)
- Circular column case moulds in the diameter range 200 to 1800mm (100R to 900R). Depending on size these may be ½ or 180 degrees (generally 100R to 400R); 1/3 or 120 degrees (generally 400R to 810R); ¼ or 90 degrees (for a 750R mould.) and 1/5 or 72 degrees for the 1800 diameter mould (900R).
- There are available some 23, 28, and 30 moulds in the external corner, internal corner and column case categories respectively, which should suit all circumstances likely to be encountered.
- Mould length is typically 3000mm. But there is a range of lengths available from 2400 to 3800mm.

Therefore, if the radius specified can be achieved using an existing mould the consequent savings means the economic equation moves strongly in favour of the precast option.

We have on display in our warehouse at 39-49 Abbotsford Street, West Melbourne a number of examples of plasterglass mouldings in the above categories. You are invited to inspect them to assure that the material and quality meet your expectations.

We further invite you to discuss your project with us and let us help in the achievement of a better outcome for yourself and the project.

For additional information please contact **MPS Plaster Supply (0393297300)** or **Adrian Philipp (0488080106)**.