



Site Guide Supplement

Document

| Supplement | ISSUE DATE |
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| Curving GIB® Plasterboard - Superseding Page 56 of 'GIB® Site Guide, 2018' | August 2020 |
| Curving GIB® Plasterboard | May 2021 |



Curving GIB® Plasterboard

This bulletin provides additional information on the topic of curving GIB® Plasterboard.

Section 4.5 in the GIB® Site Guide covers the topic of curving GIB® Plasterboard. This section lists minimum bending radii for 4 products – 10/13mm GIB® Standard and 10/13mm GIB Ultraline®. Section 4.5 also notes that other performance boards such as GIB Fyreline® and GIB Aqualine® can be curved but with slightly increased radii due to the increased density of the board.

Section 4.5 also goes on to recommend that high density boards such as GIB Braceline® GIB Noiseline® and GIB Toughline® should not be curved due to risk of breakage.

Additional development work by the GIB® Technical Team has expanded the information above, resulting in the table below.

Note Curved walls cannot be incorporated into structural bracing or fire rated systems.

Minimum Bending Radii of GIB® Plasterboard

| Board thickness/type | Minimum radius (wet)* | Minimum radius (dry) |
|------------------------------------|-----------------------|----------------------|
| 10mm GIB® Standard | 900mm | 1200mm |
| 13mm GIB® Standard | 1000mm | 1500mm |
| 10mm GIB Ultraline® | | 1200mm |
| 13mm GIB Ultraline® | | 1500mm |
| 10mm GIB Fyreline® | 1000mm | 1200mm |
| 13mm GIB Fyreline® | 1200mm | 1500mm |
| 10mm GIB Braceline® GIB Noiseline® | 1000mm | 1200mm |
| 13mm GIB Braceline® GIB Noiseline® | 1200mm | 1500mm |
| 13mm GIB X-Block® | | 1500mm |
| 10mm GIB Weatherline® | | 1200mm |
| 13mm GIB Weatherline® | | 1500mm |

The development work found that curving GIB® plasterboard requires a degree of patience. Rushing the curving process can result in board breakages. Taking your time and allowing the board to take the curve is the best approach. The typical time taken to successfully fit a board to a curve is 30-40 minutes. 16mm and 19mm GIB Fyreline®, GIB Quietline® and GIB Barrierline® are not suitable for curving.

**For more information call the
GIB® Helpline on 0800 100 442.**



Curving GIB® Plasterboard

This bulletin supersedes page 56 of 'GIB® Site Guide, 2018' and provides updated information on the topic of curving GIB® plasterboard.

GIB® plasterboard can be curved. Curvature is dependent on the thickness and whether the board is applied wet or dry.

Additional development work by the GIB® Technical Team has updated the minimum bending radii of various product and framing centres, resulting in the tables below. The radii shown are for GIB® Standard and GIB Ultraline® as well as other performance boards such as GIB Fyrelite®, GIB Aqualine®, GIB Braceline®, GIB Noiseline®, GIB X-Block® and GIB Weatherline®.

It is not recommended to curve thicker and some high density boards such as 16mm and 19mm GIB Fyrelite®, GIB Toughline®, GIB Toughline® Aqua and GIB Barrierline® due to the risk of breakage.

Curved walls can be incorporated into performance systems provided the curving is carried out strictly in accordance with the application method in this bulletin. The curving must not weaken or crack the gypsum core. The projection of a curved GIB EzyBrace® bracing element should be used as the effective wall length, as illustrated below.

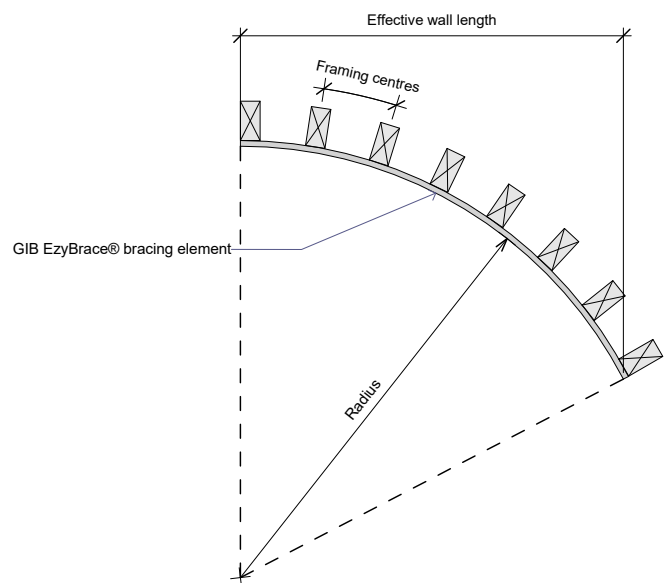
Minimum Bending Radii of GIB® Plasterboard

| Board thickness/ type | Minimum radius (wet)* | Minimum radius (dry) |
|-------------------------------|--------------------------|-------------------------|
| 10mm GIB® Plasterboard ** | 1000mm | 1200mm |
| 13mm GIB® Plasterboard *** | 1200mm | 1500mm |

- * Not applicable to GIB Weatherline® rigid air barrier and GIB Aqualine®
- ** Includes 10mm GIB Weatherline® rigid air barrier
- *** Includes 13mm GIB Weatherline® rigid air barrier but excludes 13mm GIB Toughline® and GIB Toughline® Aqua

Framing Centres

| Wall or Ceiling Radius | Maximum Stud, Batten or Joist Spacing |
|------------------------|--|
| 900mm – 1200mm | 200mm |
| 1200mm – 3000mm | 300mm |
| 3000mm – 4000mm | 400mm |
| Over 4000mm | 600mm (450mm for 10mm GIB® Plasterboard in ceiling applications) |



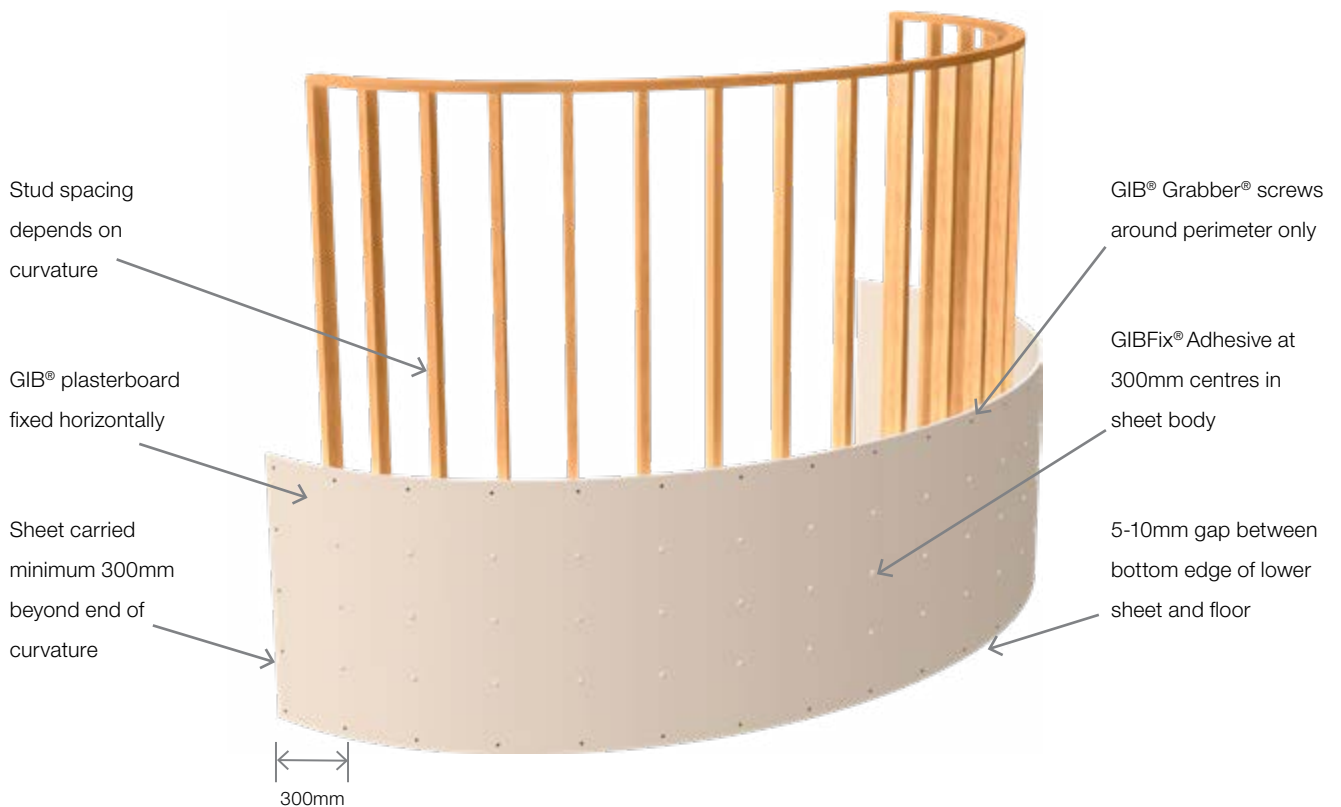
Application Method

- Ensure that framing spacings in the table above are correct.
- Sheets must be fixed horizontally to walls.
- If possible, select board length to allow for one unbroken panel to cover the entire curve with enough extra length to extend 300mm beyond each end.
- When curving ‘wet’, apply water with a paint roller to both sides. Approximately 40 mL/m² of water and 10 minutes set time are required.
- When creating an outside curve, begin installation at one end and fasten the sheet as it is wrapped around the curve.
- When creating an inside curve, start fastening the sheet at the centre of the curve and work outwards to the end of the sheet.

The development work found that curving GIB® plasterboard requires patience. Rushing the curving process can result in board breakages. Taking your time and allowing the board to take the curve is the best approach. The typical time taken to successfully fit a board to a curve is 30 - 40 minutes.

Note Lining the inside of the curve will be more difficult than lining the outside. This will require additional labour and the GIB® plasterboard must be curved prior to installation.

For more information call the GIB® Helpline on 0800 100 442.



Note For performance systems, refer to relevant specification sheet for the fastener and nog requirements.