Gypsum Board is the name for a family of board products consisting of a noncombustible core, primarily of gypsum, with a paper surfacing on the face, back and long edges.*

The popularity of gypsum board results from a number of factors. First, it takes virtually any decoration – drywall paint or textures to vinyl and paper laminates. It also lends itself to creative shaping of interior surfaces, allowing the maximum in design flexibility. Gypsum board is an economical alternative to other products. Because it is lightweight, it is easy to handle for speedy installation. With its natural properties, it is durable yet easy to repair. In addition, gypsum board’s fire resistance and sound control capabilities further demonstrate its desirability in building systems.

Ever conscious of the environmental challenges we face in today’s world, National Gypsum produces its gypsum board with 100 percent recycled paper on both the face and back. Gold Bond gypsum board is available with a variety of edge configurations. For easy joint finishing, the tapered edge is preferred to provide a monolithic surface. Where joints will be exposed, square or beveled edges should be considered. National Gypsum also manufactures gypsum board with proprietary edge configurations made to accommodate a variety of wall systems and finishing techniques.

*GA-216

Fire and sound ratings for building systems utilizing gypsum board are dependent on the core type and thickness of the gypsum board, its application in conjunction with the component parts, and the manner in which it is applied.

Tests for fire resistance and sound transmission, performed by independent laboratories, have resulted in specific ratings for walls/partitions; floor/ceiling assemblies; shaftwalls, stairwells and area separation walls; and columns. For maximum fire resistance and sound control, double layer construction is generally recommended since the additional mass further retards heat and noise penetration.

Gypsum board can be installed to both metal and wood framing using nails, screws or adhesives in combination with nails or screws. In many instances, the application will dictate which fastening method is appropriate.

Control joints may be necessary to prevent cracking in the gypsum board facing of drywall systems, especially in areas where structural elements such as slabs, columns or exterior walls can bear directly on non-load-bearing partitions. To relieve the stresses which occur as a result of movement induced by changes in moisture, temperature or both, control joints are required in both partitions and ceilings.

Gypsum Board Insulating Properties

For purposes of calculating “U” values, the “C” factor for 1” gypsum board is 1.2; Resistance “R” for 3/8” board is .32; for 1/2” board .45; for 5/8” board .56 and for 1” board .83.

WEIGHTS

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Gypsum Board Spec.</th>
<th>Gypsum Board Sheathing</th>
<th>Durason All Standard Patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4” Regular</td>
<td>1.2 lbs/SF</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>3/8” Regular</td>
<td>1.2 lbs/SF</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>1/2” Regular</td>
<td>1.6 lbs/SF</td>
<td></td>
<td>25 or less</td>
</tr>
</tbody>
</table>

Note: To achieve tighter bending radii, use Gold Bond 1/4” High Flex Gypsum Board. See page 75 for additional information and 1/4” High Flex minimum bending radii chart.

SURFACE BURNING CHARACTERISTICS (Fire Hazard Classification) Tested in accordance with ASTM E 84