

# Expanded PVC Product Data



| Property                           | Units                 | Value (1) : 1mm - 6mm         | Value: 10mm - 25mm            | ASTM Method |
|------------------------------------|-----------------------|-------------------------------|-------------------------------|-------------|
| <b>Physical</b>                    |                       |                               |                               |             |
| Density                            | g/cm <sup>3</sup>     | 0.70                          | 0.55                          | D 792       |
| Water Absorption                   | %                     | 0.3                           | 0.15                          | D 570       |
| Water Absorption                   | %                     | 0.9                           | —                             | D 2842      |
| <b>Mechanical</b>                  |                       |                               |                               |             |
| Tensile Strength                   | psi                   | 3000                          | 2256                          | D 638       |
| Tensile Modulus                    | psi                   | 232,000                       | 144,000                       | D 638       |
| Flexural Strength                  | psi                   | —                             | 3329                          | D 790       |
| Flexural Modulus                   | psi                   | —                             | 144,219                       | D 790       |
| Nail Hold                          | Lbf/in of penetration | —                             | 35                            | D 1761      |
| Screw Hold                         | Lbf/in of penetration | —                             | 680                           | D 1761      |
| Staple Hold                        | Lbf/in of penetration | —                             | 180                           | D 1761      |
| Gardner Impact                     | in/lbs                | —                             | 103                           | D 4228      |
| Izod Impact Strength               | ft-lb/in              | 0.53                          | —                             | D 256       |
| Charpy Impact<br>(Un-notched @23°) | ft-lb/in              | 8.1                           | 4.5                           | D 256       |
| <b>Thermal</b>                     |                       |                               |                               |             |
| Heat Deflection Temp<br>(264 psi)  | °F                    | 151                           | 150                           | D 648       |
| Coefficient of Linear<br>Expansion | in/in/°F              | 4.0 × 10 <sup>-5</sup>        | 3.2 × 10 <sup>-5</sup>        | D 696       |
| Thermal Conductivity               | W/mK                  | 0.084                         | —                             | C 177       |
| <b>Flammability Ratings</b>        |                       |                               |                               |             |
| Burning Rate                       | in/min                | No burn when<br>flame removed | No burn when<br>flame removed | —           |
| Flame Spread Index                 | —                     | 20                            | 20                            | E 84        |
| Vertical Burn Test                 | —                     | 5-V                           | —                             | UL 94       |
| Foam Fire Test                     | —                     | Passed/Classified             | —                             | UL 1975     |
| Oil Canning (@ 140°)               | °F                    | —                             | Passed                        | D 648       |
| <b>Electrical</b>                  |                       |                               |                               |             |
| Dielectric Strength                | kV/cm                 | 112                           | —                             | D 149       |