# WallGUARD®

**Concrete Faced Insulated Perimeter Wall Panels** 







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WallGUARD® Concrete Faced Insulated Perimeter Wall Panels are prefinished, "one-step" exterior insulating panels intended for use below and above grade in new or retrofit residential, commercial, industrial and institutional applications. WallGUARD® panels protect and insulate the exposed area of foundations, slab edges, rim joists and other perimeter wall areas. The tongue & groove edges of each panel help assure a tight fit and minimize air infiltration.

WallGUARD® panels consist of Styrofoam® brand extruded polystyrene insulation with a factory applied 5/16" thick latex-modified concrete facing. The finished panel surface is 24"x48" (610mm x 120mm) with a tongue and groove along the 48" edge. Panels are available in standard insulation thicknesses of 2" (50mm) R-10 and 3" (75mm) R-15.

WallGUARD® panels provide building owners with a durable, insulated, abuse-resistant wall cladding and building occupants with a more comfortable environment by insulating the exposed area of the building's foundation, which can account for 10% or more of total heat loss.



WallGUARD® panels can also be used to insulate and protect parapet walls. The panels provide for impact resistance with their durable latex modified concrete facing while insulating the parapet to meet continuous insulations requirements.







WallGUARD® panels are installed using specially designed galvanized steel mounting clips, which are

included with each pallet of product. They can be installed in any weather, without the need for highly skilled labor. Due to the nature of their installation, WallGUARD® panels can be removed and reused when applicable.



## Protect Your Investment with WallGUARD®

| Features   | Benefits  |
|--|---|
| Combines protection and excellent insulation in a single product | <ul> <li>Efficiently protects interior-use areas from adverse<br/>temperature changes</li> <li>Damage-resistant mortar facing protects insulation<br/>and wall system against physical abuse</li> </ul> |
| Long-term, high insulation value                                 | <ul> <li>Reduces energy costs. Continuous insulation<br/>provides superior thermal efficiency. Reduces<br/>condensation problems</li> </ul>   |
| Proven moisture resistance                                       | Maintains R-Value   |
| Tongue and groove panel edge                                     | <ul> <li>Aids alignment and improves whole wall insulation value</li> </ul>   |
| Prefabricated hardware   | Simple, fast and economical installation  |
| Lightweight  | <ul><li>Easy to handle at only 4.5 lbs per square foot</li><li>Cuts easily with a masonry saw blade</li></ul>   |
| Reusable   | <ul> <li>Panels are recyclable and can be removed and<br/>reinstalled at a later time</li> </ul>  |
| Latex-modified concrete facing                                   | Accepts elastomeric, stucco, paint and other finishes   |

WallGUARD® panels should be installed vertically (48" edge) in perimeter applications when possible. Panels are not suited for irregularly shaped buildings with many corners or curved surfaces, or for masonry foundations with many surface irregularities. As with any cement based product, color variation, efflorescence, and/or hairline cracking of the cementitious facing may occur. These phenomenon will not affect the performance of the WallGUARD® panels. If uniform or matching coloring is required, a quality latex masonry coating must be applied.

WallGUARD® panels can be cut on-site using a masonry saw. Whether panels are wet cut or dry cut, all cuttings should be rinsed or blown with condensed air off the surface of the panels, and cut panels should be individually handled until dry or installed.

WallGUARD® panels are shipped in shrink-wrapped pallets of 38 panels both for 2" and 3". Each full pallet comes with securement clips, drill bit and fasteners in the following quantities:

- (76) galvanized steel securement clips
- (160) 1-3/4" (33mm) concrete screws
- (40) 3-3/4" concrete screws
- (2) 3/16" masonry drill bit





## **WallGUARD®**

#### **Physical Properties**



| Attributes                    | Value  | Testing                           |
|-------------------------------|--|-----------------------------------|
| Extruded Polystyrene          | • Type VI  | • ASTM C 578                      |
| Tongue & Groove Long<br>Edges |  |                                   |
| Latex Modified Concrete Face  | • 5/16" (8mm)  |                                   |
| Finished Overall Dimensions   | <ul><li>24" wide (610mm)</li><li>48" long (1219mm)</li><li>2.3125" thick (69mm) for 2" foam</li><li>3.3125" thick (84mm) for 3" foam</li></ul> |                                   |
| Weight                        | • 4.5 lbs./ft.2 (22 kg.m2)   |                                   |
| R Value                       | • 5 per inch of foam   | • ASTM C 518 (0.03 m2·K/W per mm) |
| Thermal Conductivity          | • 0.2  |                                   |
| Compressive Strength          | • 40 lbs./in² (275.6 kPa)  | ASTM D 1621 (Foam insulation)     |
| Point Loading (1"x1")         | • 450 lbs./in² (3101 kPa)  |                                   |
| Water Absorption              | • <0.7   | • ASTM D 2842                     |
| 2" Steel Ball Drop            | • Slight indentations <0.05 (1.3mm)  | • FM4470                          |
| Freeze/Thaw                   | • 750 cycles   | • ASTM C 666"B"                   |
| Permeability                  | • 0.8  | • ASTM E 96                       |





## Additional Concrete Building Envelope Products from T. Clear Corporation

LightGUARD® & HeavyGUARD® Protected Membrane
Roofing Insulation Panels
ProGUARD® Concrete Insulated Sheathing
ThermaDRY® Insulating Drainage Panels

For more information on any T. Clear Products or for a list of nationwide manufacturer's representatives, call T. Clear at **800-544-7398** or email **sales@tclear.com**.

### **T. Clear Warranty**

#### **Material Only Warranty**

Material only warranty offered at no additional charge.

This warranty insures that your system will:

- Retain at least 80% of its R-value for 20 years
- WallGUARD panels will not delaminate



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