

## DESCRIPTION

A proven structural composite material that consists of two external steel skins thermally bonded to a low-density polyethylene (LDPE) core.

Combined, these materials form a structure that is extremely strong and energy absorbent – providing durability, impact resistance and aesthetics for the most demanding applications.

PSG SteelPOLY is a magnetic receptive sheet with a non-ghosting dry erase finish on one side, and an optimized print surface on the other.

## COMPOSITION Based on ECCA Guidelines

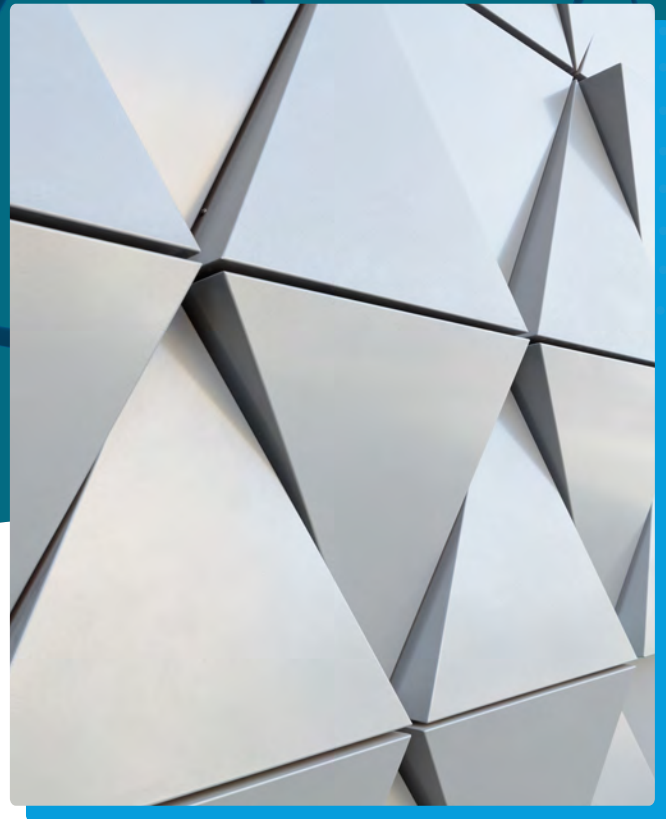
- Protection Foil
- Anneal Laquering
- Steel Layer
- Adhesion
- Polyethylene Core

## FEATURES & BENEFITS

- Strong & durable galvanized steel
- Receptive to magnetic materials
- Printable finish on one side
- Dry erase finish on one side
- Stiffer, self supporting

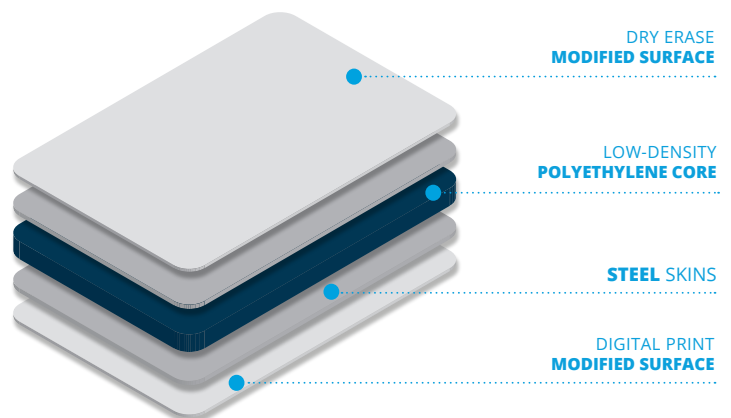
## APPLICATIONS

- POS/POP
- Menu Boards
- Interior/Exterior Signage
- Interior Design
- Real Estate Signage
- Ceiling/Wall Panels
- Monument Signage
- Any Application Where Magnetic Materials Are Used



## PRODUCT AVAILABILITY

|                 |                        |
|-----------------|------------------------|
| Panel Thickness | 0.354" (3mm)           |
| Weight          | 1.3 lb/ft <sup>2</sup> |
| Skin            | Galvanized Steel       |
| Skin Thickness  | 0.012" (0.30mm)        |
| Core Material   | LDPE                   |
| Sheet Sizes     | 4'x8'                  |



## CONTACT US

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# Steel Composite Sheets

| PHYSICAL PROPERTIES                                     | STANDARD                     | TOLERANCE | UNITS |
|---|------------------------------|-----------|-------|
| Tolerance in Length                                     | DIN 16927 / ISO 11833-1      | ±3        | mm    |
| Tolerance in Width                                      | DIN 16927 / ISO 11833-1      | ±3        | mm    |
| Tolerance in Thickness                                  | DIN 16927 / ISO 11833-1      | ±0.15     | mm    |
| Squareness<br>(Maximum difference of diagonal)          | -                            | 5         | -     |
| Flatness Tolerance<br>(Lengthwise & Crosswise Swelling) | -                            | -         | -     |
| Horizontal Flatness                                     | -                            | 3 on 1000 | mm    |
| Longitudinal Roughness                                  | -                            | 5 on 1000 | mm    |
| Weight  | 3mm = 7.11 kg/m <sup>3</sup> | -         | -     |

| TECHNICAL PROPERTIES                              | STANDARD                                   | UNITS                |
|---|--|----------------------|
| Flexural Stiffness                                | 2700                                       | kNcm <sup>2</sup> /m |
| Flexural Module                                   | 25000                                      | Mpa                  |
| Penetrating Strength                              | 26   | KN                   |
| Shear Strength                                    | 76   | Mpa                  |
| Thermal Conduction State D.C.<br>Resistance (1/Λ) | 0.008                                      | m <sup>2</sup> K/W   |
| Thermal Conducting Coefficient (U)                | 5.61                                       | W/m <sup>2</sup> K   |
| Temperature Durability                            | -50°C until + 85°C                         | -                    |
| Linear Thermal Expansion                          | 1.8mm/m at 100°C<br>temperature difference | -                    |

| ANNEAL<br>LAQUERING                | STANDARD                      |
|------------------------------------|-------------------------------|
| Material                           | Polyester<br>Laquered Surface |
| Thickness of Top Coat              | 18 ± 2 µm                     |
| Gloss Level (60°)<br>after Gardner | Matte: 20 - 40 ± 10           |
| Pencil Hardness                    | Min. F                        |

| STEEL LAYER                  | STANDARD         |
|------------------------------|------------------|
| Steel Quality                | Unalloyed Steel  |
| Treatment                    | Zinc Galvanized  |
| Peeling Force<br>(DIN 53278) | Target > 30 N/cm |

| ADHESIVE                     | STANDARD          |
|------------------------------|-------------------|
| Base Material                | Hot Melt PE Based |
| Layer Thickness              | CA. 50 µm         |
| Peeling Force<br>(DIN 53278) | Target > 30 N/cm  |

| POLYETHYLENE CORE | STANDARD            |
|-------------------|---------------------|
| Material          | LDPE                |
| Density           | 1 kg/m <sup>3</sup> |

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