

PERMALIGHT® Bumper Guards & 2D and 3D corners

April 2014  
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1. What material makes up this cushion?  
**Recyclable Polyurethane Foam**
2. How is this item installed?  
*Most Types: self-adhesive strips.*  
**Clean surface that item shall be applied to. Remove red-colored protective silicone strip and press-apply bumper guard to clean, dry, dust-free surface.**  
  
*Type B: non-adhesive.*  
**Clean surface that item shall be applied to. Press B-groove onto I-beam. If stronger bond is desired, apply special adhesive (available separately: Item-No.: 83-0789) for improved attachment. Then firmly press-apply bumper guard type B to clean, dry, dust-free surface.**  
  
*Several Types NOW NEW: come with Steel Support + 6 Screws/ 6 Anchors. Position Bumper in place, mark screw holes with pencil. Pre-drill holes, insert anchor, then screw mount bumper to surface.*
3. Is mounting hardware included? **Yes: screws and anchors for those Bumpers with Steel Support. NO mounting hardware needed for Adhesive-supported Types and squeeze-on Type B.**
4. What can this material be mounted to?  
*Types A, A+, E, H, H+ and H+Steel: any corner with 90° angle, typically wall corners, machinery, equipment, overhead protrusions, objects like ladders, mail/delivery carts, etc.*  
*Types B, G: ideal on I-Beam shelves*  
*Types C, C+, D, F: any flat surface, e.g., on machinery, equipment, walls, shelves, equipment, forklifts, trucks, overhead protrusions; in parking garages to avoid dings and scrapes on car doors.*  
*Type R1 + R2: on pipes and other round obstacles; underneath parking garage gate arms.*  
*Type S1, S1Steel: in loading dock areas; parking garages; where very strong wall protection is needed.*  
*2D + 3D Corners: as end-caps for continuous bumper types A, B, C; on pointed furniture corners (bookcases, metal filing cabinets, etc).*
5. Can this material be used indoors, outdoors or both?  
 ✓ **Black-Yellow indoor and outdoor use.**  
 ✓ **Reflective indoor and outdoor use = ideal in parking environments; areas with car headlights.**  
**!!! Photoluminescent and Fluorescent/Photoluminescent Types ONLY FOR INDOOR use!!!**
6. Is this material weather resistant?  
**Black-Yellow and Reflective typically yes.**  
**!!! Photoluminescent and Fluorescent/Photoluminescent Types Surface NO!!!**
7. Is this material flexible or rigid?  
**Bendable, yet neither flexible nor rigid.**
8. What is the temperature range of this material?  
**From -35° Celsius = -31° Fahrenheit to 80° Celsius = 176° Fahrenheit in normal dry conditions.**
9. What is the temperature range of the adhesive?  
**From -40° Celsius = -40° Fahrenheit to 100° Celsius = 212° Fahrenheit in normal dry conditions.**  
**If soapy water or frost penetrate the space between adhesive and object surface, such unusually harsh conditions may result in loosening.**

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10. What type of adhesive is on the adhesive-backed strips?

**Light- and aging resistant, modified, durable Acrylic Adhesive.**

**Adhesive Strength: 25 Newton per Inch.**

**Type G only: double-sided non-woven adhesive, temperature resistant, modified acrylate adhesive.**

**Short term: up to 140° F. Long term: up to 104° F. Adhesive Strength: 37.5 Newton per Inch.**

11. What is the purpose/benefit of this material (i.e. withstand impact, guard, align...etc)?

- **make protrusions & obstacles along the way brightly visible**
- **avoid the risk of injury as a person hits the soft, cushioned bumper guard instead of a sharp, pointed corner or hard metal object**
- **protect building features by reducing the damage to corners (imagine carts constantly cutting a corner and damaging the corner edge ...)**
- **protect equipment & machinery**
- **protect cars in parking environments: avoid dings and scrapes on car paint**

12. What is the durometer of this material and the shore scale it was measured on?

**Approximately 55 measured per Shore A**

13. Flammability Test:

**DIN 4102 - Part 1: B2 (1998) Reaction to fire tests - Ignitability of building products subjected to direct impingement of flame. EN Class: dfl per EN ISO 9239-1.**

14. What is the finish of this material? (textured/ pebbled, smooth, shiny...etc)

**Matte smooth finish for the black-yellow bumpers.**

**Reflective patterned surface on the reflective bumpers.**

**Shiny smooth finish for the photoluminescent and fluorescent/photoluminescent bumpers.**

15. Is this material marking or non-marking?

**Bumper Guard itself is non-marking. The Yellow/Black color is accomplished through reverse printing, therefore no outside-surface color application.**

16. Is this material staining or non-staining?

**Bumper Guard itself is non-staining. If pulled away following installation, adhesive remnants may be present on surface which should be removed using thinners or solvents.**

17. Thickness of this material.

**See individual cross-section graphics for the many Types available for more details.**

18. Length of the Bumper Guards.

**39-3/8" length (exactly 1 meter) on the Torrance shelf, ready to supply right away**

**Types A, B, C, E, F also in 16-foot long rolls (= 5.47 yard coil)**

**A few types may also be available in 54.7 yard extra long rolls (please contact us).**

**D, G, H and R1 available upon request: in 16 foot long rolls.**

19. Weight of material

**Weight varies by type (see detailed items list)**