TRANSLUCENT POLYCARBONATE MULTI-WALL PANEL SYSTEMS

- Skylights
- Canopies
- Walkways
- Wall Systems
- Interiors
BDL POLYCARBONATE PANEL SYSTEMS

CO-EX’S BDL® is a system of standing seam modular panels used to create vertical and sloped glazing. It is suited for a range of applications from curved skylights to interiors. Thanks to its wide variety of accessories, the system is complete, versatile, lightweight, and easy to install.

CO-EX BDL panel system is highly versatile and suitable for a wide range of daylighting applications such as:

- SKYLIGHTS
- CANOPIES
- INTERIOR SYSTEMS
- WALKWAYS
- WALL SYSTEMS

The CO-EX BDL polycarbonate panel offers many advantages when compared with other glazing alternatives.

HIGH IMPACT RESISTANCE – 200 times greater than glass
LIGHTWEIGHT – less than 1 lb. per sq. ft.
TRANSLUCENT – controlled natural daylight
DOUBLE SIDED U.V. PROTECTION – either side may be exposed to the weather
FLAME SPREAD/SMOKE DEVELOPMENT – excellent behavioral properties
EASY TO INSTALL – complete system and accessories
SAVES ENERGY – excellent thermal properties
HIGHLY FLEXIBLE – cold forms to a 11’ radius, heat formed even tighter

- Wide Range of Colors
- No Adhesives Required
- Clean Aesthetics Created by Snap Covers
- Thermal Movement is Captured Internally within the System
- Unique panel construction
- Superior Light Diffusing Properties
- High U.V. Resistance on Both Side

**TECHNICAL DATA**
- **BDL 16 Thickness:** 0.62” (16 mm)
- **Width:** nominal 23 5/8” (600 mm)
- **Length:** up to 39'
- **Colors:** Clear, Bronze, Opal, Green, Opalescent, Ice Mist and Blue
- **Panel Wt:** 16mm – .71 lbs./sq. ft.
- **U.V. Protection:** by co-extrusion, both sides
- **CC-1 Classified Material:** Per ASTM D635
- **Flammability/Smoke Development:** Per ASTM E-84 Class 1/Class A is available.
- **Color Change:** No more than 3 Delta Units per ASTM D2244-05 after 5 years, and 6 after 10 years – non pro-rated

**BDL System Acceptance:**
- MEA - New York City
- MEA - #180-02-M

**CO-EX BDL 16**
**Meets or Exceeds the Following Tests:**
- ASTM D2843 Smoke Density
- ASTM D1929 Self Ignition
- ASTM D635 Burning Extent
- ASTM E84

**BDL 16 SYSTEM**

<table>
<thead>
<tr>
<th>16 mm PANELS</th>
<th>CLEAR</th>
<th>OPAL</th>
<th>ICE MIST</th>
<th>BRONZE</th>
<th>GREEN</th>
<th>BLUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Transmission (%)</td>
<td>.63</td>
<td>.21</td>
<td>.48</td>
<td>.31</td>
<td>.59</td>
<td>.58</td>
</tr>
<tr>
<td>Shading Coefficient</td>
<td>.77</td>
<td>.55</td>
<td>.68</td>
<td>.65</td>
<td>.74</td>
<td>.73</td>
</tr>
<tr>
<td>Solar Transmission (%)</td>
<td>.67</td>
<td>.28</td>
<td>.59</td>
<td>.57</td>
<td>.65</td>
<td>.64</td>
</tr>
<tr>
<td>U-Value, Btu²°F/h</td>
<td>0.41</td>
<td>0.41</td>
<td>0.41</td>
<td>0.41</td>
<td>0.41</td>
<td>0.41</td>
</tr>
<tr>
<td>R-Value (1/u) ft²°F/Btu</td>
<td>2.44</td>
<td>2.44</td>
<td>2.44</td>
<td>2.44</td>
<td>2.44</td>
<td>2.44</td>
</tr>
</tbody>
</table>

**POLYCARBONATE**
- 1.30”
- 0.78” (20 mm)
- 0.94” (24 mm)
- 23.62” (600 mm)

**ALUMINUM**
- 1.30”
- 0.78” (20 mm)
- 0.94” (24 mm)

**STEEL**
- 1.30”
- 0.78” (20 mm)
- 0.94” (24 mm)

**GRIP LOCK CONNECTORS**

**PANEL CLIPS**
feature the CO-EX "GRIPLOCK" Connection System
Exceeds All OSHA Fall Through and Point Load Requirements
USE OF PANEL CLIPS

If necessary, due to the glazing height or to the high load required, several intermediary supports must be installed and the fixing must be made with the aluminum clips.

These clips allow a solid anchoring but do not prevent the thermal expansion of the polycarbonate panel.

CO-EX MODULIT 500 LP meets or exceeds the following tests.

- ASTM D2843
- ASTM D1929
- ASTM D635
- ASTM E84

MODULIT 500 LP system is suitable for any vertical translucent glazing application such as:

- CLERESTORY GLAZING
- EXTERNAL TRANSLUCENT WALLS
- INTERNAL TRANSLUCENT PARTITIONS
MODULIT 500 LP

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>1.57&quot; (40 mm)</td>
</tr>
<tr>
<td>Width</td>
<td>20.86&quot; (530 mm)</td>
</tr>
<tr>
<td>Module Width</td>
<td>19.68&quot; (500 mm)</td>
</tr>
<tr>
<td>Rib Distance</td>
<td>1.57&quot; (40 mm)</td>
</tr>
<tr>
<td>Maximum Length</td>
<td>39&quot; or upon request</td>
</tr>
<tr>
<td>Thermal Insulation, Btu/ft²·°F</td>
<td>$U = 0.25$</td>
</tr>
</tbody>
</table>

**Colors**

<table>
<thead>
<tr>
<th>Colors</th>
<th>Light Transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear (8005)</td>
<td>68%</td>
</tr>
<tr>
<td>Opal (8121)</td>
<td>47%</td>
</tr>
</tbody>
</table>

**UV Protection**

Co-extruded on external side (both sides on request)

**Warranty**

10 years against yellowing, hail & light transmission

**Temperature of use**

-22°F to 248°F

**Sound Insulation**

23 dB

**Thermal Expansion Coefficient**

0.036 ft/ft·°F
CO-EX polycarbonate wall systems are ideal for use in vertical glazing for both interior and exterior use. When combined with colorful lighting effects, interior walls can become translucent panels that can change the mood of the room with a flick of a switch.

These effects can be translated into signage and tradeshow exhibit booths, which are economical, lightweight, and easy to transport. They are becoming a popular material for use in museums and retail establishments where unique lighting effects and economy are desired.

An ideal clerestory material, our modular wall system is perfect for areas requiring natural daylight without harsh shadows. And, with all of our fine products, our polycarbonate is coextruded with U.V. protection to insure your interior colors resist fading.

CO-EX is a leading producer of polycarbonate modular panel systems. Our staff is at your disposal to answer any questions you may have concerning vertical, curved or pitched glazing. Our extensive range of quality sheet types and systems will suit most applications.

SUGGESTED
ARCHITECTURAL SYSTEM TESTING

<table>
<thead>
<tr>
<th>TEST PERFORMANCE</th>
<th>ASTM Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self ignition temp</td>
<td>1929-3</td>
</tr>
<tr>
<td>2. Smoke density</td>
<td>D-2843</td>
</tr>
<tr>
<td>3. Burn extent</td>
<td>D-635</td>
</tr>
<tr>
<td>4. Interior flame spread</td>
<td>E-84</td>
</tr>
<tr>
<td>5. Color difference</td>
<td>D-2244-85</td>
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<tr>
<td>6. Accelerated outdoor weathering</td>
<td>D-4364</td>
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<tr>
<td>7. Yellowing index</td>
<td>1925</td>
</tr>
<tr>
<td>8. Haze and luminous testing</td>
<td>D-1003</td>
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<tr>
<td>9. Air infiltration</td>
<td>E-283</td>
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<tr>
<td>10. Water penetration</td>
<td>E-331</td>
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<tr>
<td>11. Load bearing capability</td>
<td>E-330-90</td>
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<td>12. Thermal performance test</td>
<td>CT1363</td>
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<tr>
<td>13. Solar properties</td>
<td>NFRC 201</td>
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<tr>
<td>14. OSHA fall and walk through protection</td>
<td>29 CFR 1910.23(e)</td>
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<tr>
<td>15. OSHA life safety</td>
<td>E-695-03</td>
</tr>
</tbody>
</table>

Tests and certifications available and subject to limitation on weight, section, colors, etc.