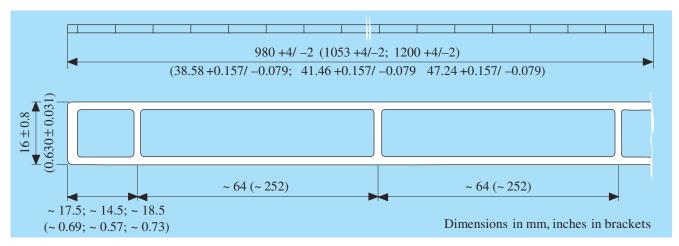
CYRO Industry

Technical Information

Product Description

DEGLAS® ALLTOP® SDP® 16 Double-skinned Acrylic Sheet





Product and benefits

The DEC® ALLTOP® SDP® 16 double-skinned sheet is a light-transmitting, heat-insulating and very weather-resistant sheet made from acrylic (polymethyl meth-acrylate, PMMA) polymer, with a particularly wide rib spacing. It was designed as a glazing panel for commercial, residential, and institutional construction as well as for greenhouses where a transparency that is better than the standard double-skinned sheets is desired, with a minimum number of supporting super structural members.

Compared to our standard NO DRIP® multi-skinned sheets, which have the proven water-dispersing coating on one side only, the ALLTOP®* sheets are coated on both sides and within the cavities.

ALLTOP® offers additional advantages for the user:

- Increased light transmission of about 91 %, compared to 75 to 86 % for conventional double-glazed panels.
- Absence of fogging, i.e. the physically unavoidable formation of condensation remains practically invisible, both within and on the surface of the ALLTOP® sheets.

- Reduced condensation water droplet formation,
 i.e. no uncontrolled dripping inside the room. Also, the
 outer surface is more effectively cleaned by rain, result ing in a clear and transparent, practically self-cleaning
 sheet.
- Increased energy saving, because more solar energy is transmitted. Results in lower heating costs.
- Better plant growth response: high light transmission in the PAR results in faster and better crop growth.

The weather-resistance, rigidity, and strength features of clear DEC® ALLTOP® SDP® sheet comes with a limited 10 year warranty. A copy of the warranty is available upon request from CYRO.

The water-dispersing NO DRIP® coating is covered by a protective layer applied during the manufacturing process. This protective layer is washed off by rainwater or condensation, thus activating the NO DRIP® coating. The protective layer can also be removed with water and a sponge or by using a water hose.

Technical Data (Typical values)								
Available lengths		2,000 to 7,000 mm (6.5' to 23')						
Light transmittance D65 (UV-absorbing)	Total energy transmission g	Clear 20070: Brown 43470:	~ 91 % ~ 50 %	~ 82 % ~ 63 %				
U-value		2.5 W/m ² K (Test report 13-901399/P2/Fi, FMPA Stuttgart) (0.49 BTU/hr•ft ² •°F)						
Coefficient of expansion		0.07 mm/m °C (0.00004 in/in/°F)						
Possible expansion due to heat and moisture		about 5 mm/m (about 1/16 in/ft)						
Max. permanent service temperature without load		70 °C (160°F)						
Weighted sound reduction index		22 dB						
Fire rating	ASTM D-635 CAN/ULC \$102.2 DIN 4102	C2 or CC2 Burning Rate < 150 Flame Spread Classification B2, normally flammable						

Support spacing

When perimeter supported or clamped, the DEC® ALLTOP® SDP® 16 sheet in a width of 980 mm (38.6") requires no additional cross members for a uniformly distributed load of 750 N/m² (15.7 lb/ft²). For greater loads and width the support spacing is given in the table. Maximum allowable spacing is in the direction parallel to the sheet's ribs.

If the skin of a cut-to-width sheet is to protrude more than 15 mm (about 5/8") beyond the last web, an INFILL SECTION 16 has to be inserted into and continuous along the cut edge. The INFILL SECTION 16 may also be required for extreme angled diagonal cuts.

Refer to local building codes to determine the applicability of these values to specific applications. Building codes will indicate the design loads to be used to determine the maximum span lengths or support spacing.

This document describes the special features of the DEC® ALLTOP® SDP® 16 double-skinned sheet. Other multiskinned sheets are described in their respective product data sheets.

For additional information on multi-skinned sheets contact your SDP® sheet distributor or CYRO.

The availability of any particular product should be checked with your supplier.

IMPORTANT NOTICE: The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE. Nothing herein is to be taken as permission, inducement or recommendation to practice any patented invention without a license.

Support spacing							
Load		DEGLAS® ALLTOP® SDP® 16 980 mm width as delivered		DEGLAS® 16	ALLTOP® SDP®		
$[N/m^2]$	(lb/ft²)	[m] Supp	ort spacing (inches)	[m] Suppo	ort spacing (inches)		
750	(15.7)		()	5.10	(200.8)		
1000	(20.9)	4.80	(189.0)	4.20	(165.4)		
1250	(26.1)	3.80	(149.6)	3.50	(137.8)		
1500	(31.3)	3.10	(122.0)	2.90	(114.2)		
1750	(35.5)	2.60	(102.4)	2.50	(98.4)		
2000	(41.8)	2.25	(88.6)	2.20	(86.6)		
2250	(47.0)	2.00	(78.7)	2.00	(78.7)		
2500	(52.2)	1.80	(70.9)	1.80	(70.9)		
2750	(57.4)	1.70	(70.0)	1.70	(70.0)		
3000	(62.6)	1.60	(63.0)	1.60	(63.0)		

Fire Precautions: DEC® SDP® sheets are produced from molding compounds which are combustible thermoplastics. Precautions used to protect combustibles from flames and high heat sources should also be observed with these materials. SDP® sheets usually burn rapidly to completion if not extinguished. The products of combustion, if sufficient air is present are carbon dioxide and water. However, in many fires, sufficient air will not be available and toxic carbon monoxide will

be formed, as it will from other combustible materials. We urge good judgment in the end use of these versatile materials and recommend that building codes be followed carefully to assure they have been used properly. Access panels may be required for evacuation and venting of rooms glazed with SDP® sheets. SDP® sheets burn more rapidly than their solid counterparts. Non-combustible end caps must be used to prevent flame from contacting the open ends of the sheet.





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Authorized distributor:

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