

Durex IBS Quantum Select

Prefabricated Curtain Wall Panel System – Insulated Building Envelope

Description	Durex® IBS Quantum Select – it is a unitized curtain wall system that integrates the performance of several wall components for providing the essential, environmental separation controls of heat / air / moisture / fire, strength, durability and aesthetics. IBS is the new trend in energy efficient exterior curtain walls. It incorporates advancements to the conventional cladding systems through a water-managed, pressure-moderated and energy efficient wall system.
Uses	IBS Quantum Select provides cost effective building envelope solution for institutional, residential, commercial, or industrial. IBS Quantum Select lightweight and flexibility make it an ideal solution for applications in high seismic/wind zones.
Features	<ul style="list-style-type: none"> • Pre-engineered Lightweight Panel Design • Speed of Construction • Pressure Moderated Rain Screen Design • Air/Water tight Building Envelope Design • Geometrically Defined Drainage Cavity (GDCC) • Superior Thermal Performance • 1 Hour Fire Rated System ULC W-489 • 2-Hour Fire Rated System ULC W-485 • Non-combustible base coats • GDCC Factor 47% (Geometrically Defined Drainage Cavity) • CI factor 0.65 RSI (R 3.9) per inch (Continuous Insulation) • CI factor 0.70 RSI (R 4.0) per inch Type II EPS (Continuous Insulation)

TECHNICAL DATA

SYSTEM COMPONENT	STANDARD/METHOD	RESULTS			
INSULATION:		Thermal Resistance		GDCC Factor	
Durex Quantum Select Type I	CAN/ULC S701	0.65 RSI (R 3.9) per inch		47%	
Durex Quantum Select Type II		0.70 RSI (R 4.0) per inch		47%	
WATER RESISTIVE BARRIER:					
Air / Vapour Barriers	ASTM E96 – Water Vapour Transmission	Method A	Method B		
Durex Green Guard		11 ng/Pa.s.m ²	48 ng/Pa.s.m ²		
Durex Ectoflex		18 ng/Pa.s.m ²	91 ng/Pa.s.m ²		
Air Barriers	(Refer to product specific Technical Data Sheet for more detailed data)				
Durex Flexcrete		400 ng/Pa.s.m ²	972 ng/Pa.s.m ²		
Durex AirStop		185 ng/Pa.s.m ²	505 ng/Pa.s.m ²		
Durex Dur-A-Mastic 100		248 ng/Pa.s.m ²	645 ng/Pa.s.m ²		
Durex Blue Shield		107 ng/Pa.s.m ²	268 ng/Pa.s.m ²		
INSULATION ADHESIVE:					
Durex Flexcrete	ASTM D1623 Adhesion Properties	1.12 MPa (162 psi)			
Durex Monobase	(Refer to product specific Technical Data Sheet for more detailed data)	1.38 MPa (200 psi)			
Durex VCA 3.0		1.02 MPa (148 psi)			
LAMINA:					
Impact Resistance	ASTM E2486 – Impact Resistance		Retention Physical	Retention Performance	
Durex Fiberglass Mesh		Standard	3 N.m	10 N.m	PASS
(Note: Impact resistance level is directly related to the weight and layers of Fiberglass mesh used in the lamina)	(Refer to Table 1.5.9 of the IBS Quantum Select Specifications for detailed selection chart for guidance on level of impact resistance required)	Intermediate	8 N.m	15 N.m	PASS
		High	13 N.m	20 N.m	PASS
		Ultra High	20 N.m	30 N.m	PASS
		Extreme	25 N.m	40 N.m	PASS
Base Coat					
Durex Uniplast/Acrybond “S”	CAN/ULC S114 Noncombustibility	Rated Noncombustible			
Durex Monobase		Rated Noncombustible			
FINISHES:					
Durex Architectural Coatings	CAN/ULC S716.1 & CCMC Report # 13103-R	Durex Architectural Coatings Meet and exceed all requirements			
Classic Series					
Premium Series					
Artisan Series	(Refer to product specific Technical Data Sheet and CCMC Evaluation Report # 13103-R for more detailed data)				
Kolor Gard Series					
Elastomeric (FX) Series					

PERFORMANCE: <i>(Refer CCMC Evaluation Report # 13103-R for complete detailed performance data)</i>		
Fire Protection	CAN/ULC S101 & CAN/ULC S114 <i>(Compliance to NBC 3.2.3.8(1) (b))</i> CAN/ULC S101 <i>(Fire Resistance rated Assemblies)</i>	Rated as non-combustible cladding ULC design EW21/ EW22 1 hr. FR rating ULC design W489 (Load Bearing) 2 hrs. FR rating ULC design W485 (Load Bearing) 2 hrs. FR rating ULC design W456 (Non-Load Bearing)
	CAN/ULC S134 <i>(Compliance to NBC 3.1.5.5)</i>	Intertek listing # DPL-WEIFS 30-01
Wind Load Resistance	ASTM E330 – sustained	-2.5 kPa for 60min. – no visible damage to any of the wall components
	ASTM E330 – cyclic	600 cycles alt. 0 to -2.5kPa – no visible damage to any of the wall components
	ASTM E330 – blow-out	-3.75kPa applied for 10 sec. – no visible damage to any of the wall components - max. pressure 7.12 kPa
Water Tightness	ASTM E331	400 Pa pressure difference for 15 min. – no water penetration through the exterior surface finish
System Compliance	CCMC Technical Guide for EIFS CAN/ULC S716.1 EIFS Materials & System	CCMC Evaluation Report # 13103-R Durex IBS Quantum Select is fully compliant with: CAN/ULC S716.1 Materials & System CAN/ULC S716.2 Installation of Components & WRB CAN/ULC S716.3 Design Application

Building Code Conformance:
Durex® IBS Quantum Select complies with the following building code requirements (refer to applicable building code)

Classification	Category 1 CAN/ULC S114 & CAN/ULC S101 CAN/ULC S134	Non-Combustible Lamina Fire Test of Exterior Wall Assemblies
Part 3	Article 3.1.5.5 Article 3.1.5.2 Article 3.2.3.7 & Table 3.2.3.7 Sub-Section 3.2.3.8 (1) (b)	Combustible Cladding on Exterior Walls Allowable Minor Combustible Components >10% Unprotected Openings CAN/ULC S101 –15minutes-Non-Combustible Base Coat
Part 5	Section 5.6.1 Sub-Section 5.6.2.1 Section 5.9.4	Protection from Precipitation Sealing and Drainage Exterior Insulation Finish Systems
Part 9	Clause 9.25.2.2(1)(d) Sub-Section 9.25.5.2 Clause 9.27.1.1(5) Section 9.27.2 Article 9.27.3.1 Sub-Section 9.27.13 Article 9.10.14.5 & Table 9.10.14.5 (A) Article 9.10.15.5	Insulation Materials CAN/ULC S701 Position of Low Permeance Membranes General (Cladding, Application) Required Protection from Precipitation Elements of Second Plane of Protection Exterior Insulation Finish Systems >10% Unprotected Openings >0.6 m Limiting Distance

- Application** Apply all Durex System Products and components, (structural framing members, sheathing, WRB, insulation, fasteners, base coat, reinforcing mesh, finish coat, sealants) in strict accordance with Durabond’s printed instructions. See Durabond’s Standard Specifications/Details and Durex Product Data Sheets.
- Clean-up** Clean all tools promptly after use with clean water. Do not allow mixes to dry on tools.
- Storage** Store all Durex® Products and components in a dry vented, waterproof location, stacked off the ground with ambient temperatures above 5°C (41°F). Keep materials dry, protected from dampness and moisture and away from direct sunlight. KEEP FROM FREEZING.
- Health and Safety** For information and advice on the safe handling, storage and disposal of chemical products, refer to the most recent SDS sheet containing physical, environmental, toxic and other safety/materials handling data. For industrial use only. Keep out of reach of children.
- Warranty** Durabond Products Limited fully warrants their products when used and applied in strict accordance with the printed instructions on product mixing and product application. In any case Durabond’s responsibility shall not exceed either the refund of the purchase price or the replacement of the purchased product.
- Technical Services** Technical support is available upon request at info@durabond.com. For the latest version of this data sheet, please visit our website at www.durabond.com, call toll free at 1-877-DURABOND (387-2266) or speak with your Durabond Technical Coatings Ltd. sales representative.

