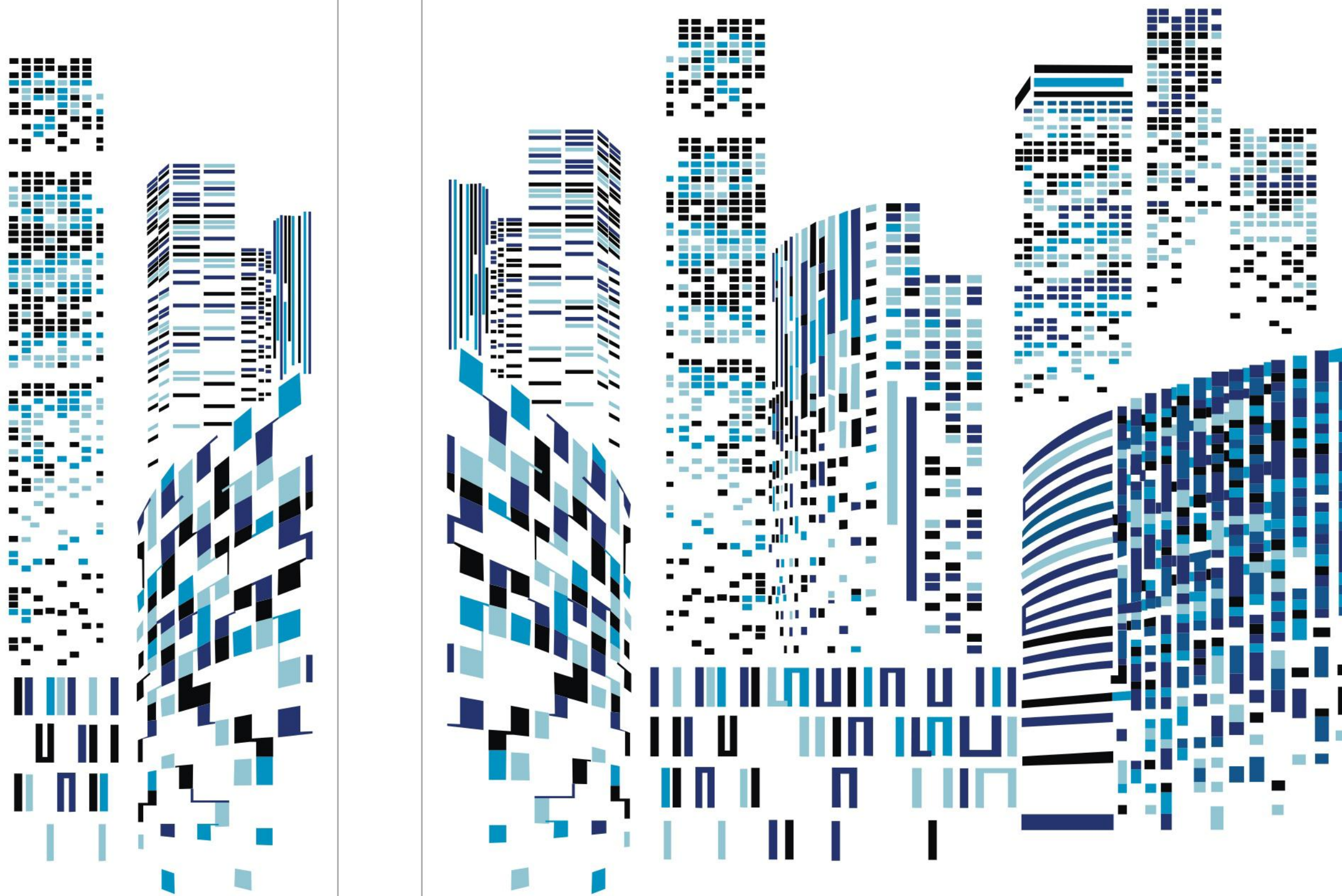


XCL
Xterior
Compact
Laminate

EURO WOODS

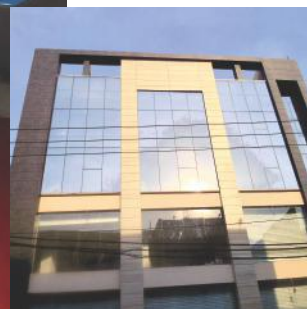
ROYALÉ TOUCHÉ
XCL
Xterior
Compact
Laminate

The New Frontier of
FACADES



ELEGANCE MEETS DURABILITY





DESIGN YOUR BUILDING UNCONVENTIONALLY

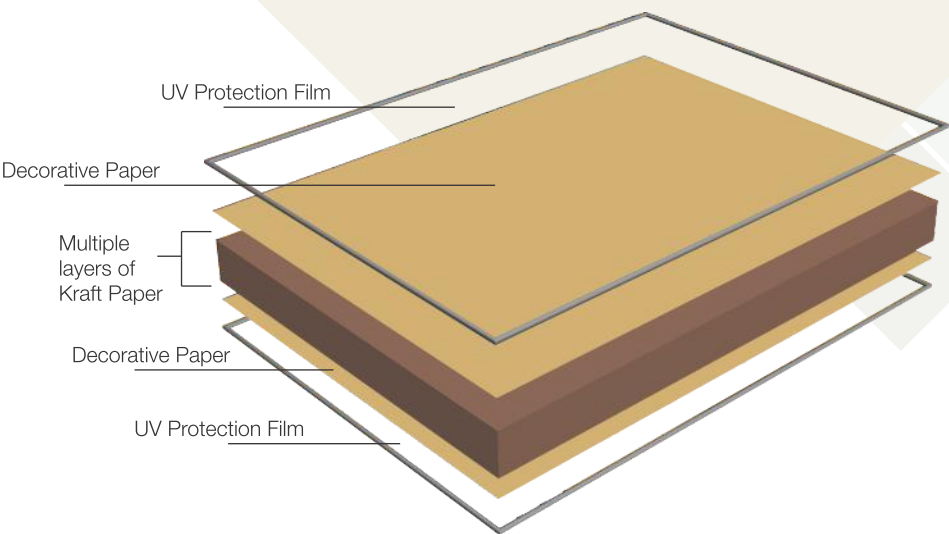
With Royalé Touché Xterior Compact Laminate (XCL)

Xterior Compact Laminate, is a high quality building product, innovative, practical and durable solution for all your building facade. These panels are available in large formats. Flat panel have wide application for facade, cladding, durable balcony and fencing etc. The exceptional characteristics of XCL panel

makes this product a versatile solution with simple installation and maintenance. Thereby improving the look, performance and durability of any building.

XCL panel conforms to EN438 standards and are produced in a thermosetting press at high pressure and temperature. The additional acrylic PUR resins provides extreme weather protection that is particularly suitable for long lasting exterior application.

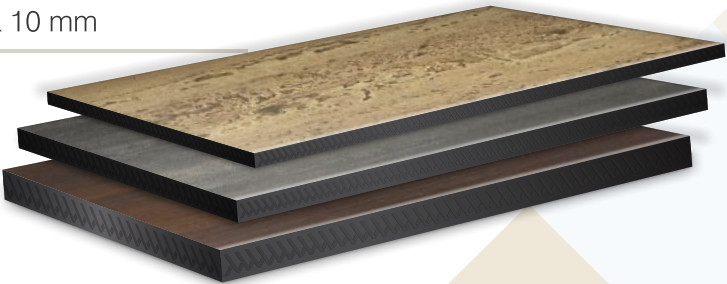
COMPOSITION



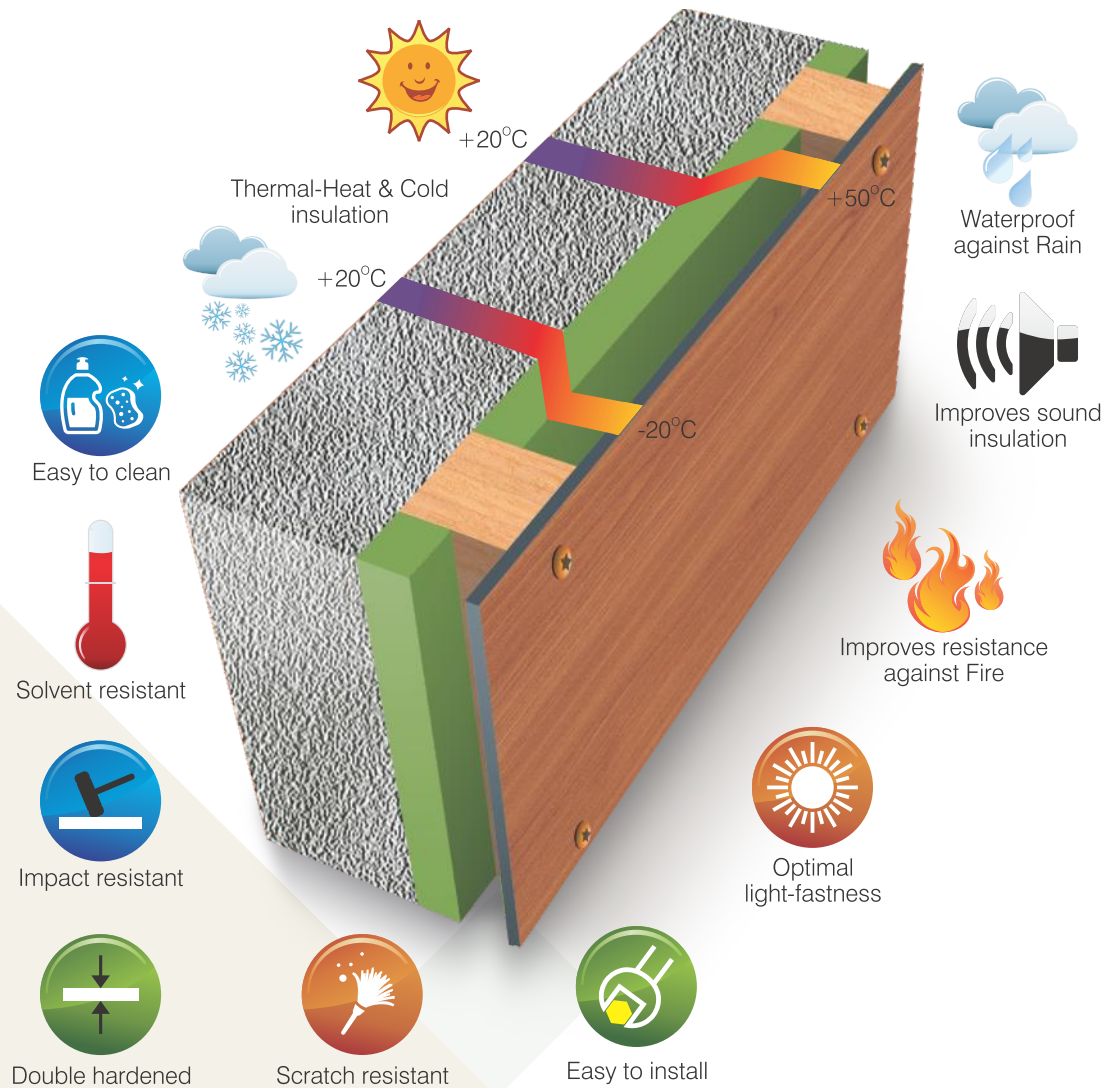
Royalé Touché Exterior compact laminate XCL is a solid phenolic engineered exterior facade panel having a decorative surface on both the sides. Robust and resilient, these rigid homogeneous panels are manufactured by Royalé Touché Group, using tough thermosetting resins reinforced with cellulose fibre for added strength and durability.

An acrylic overlay provides enhanced UV protection and the panels are rigorously tested for severe use in accordance with EN-438, making them ideal for application in ventilated facades and other external building elements.

Sizes	1220 x 2440 mm
	1220 x 3050 mm
	*1300 x 3050 mm
	*1830 x 3660 mm
	*(Available in Selected Colours)
Thickness	6, 8 & 10 mm



FEATURES AND BENEFITS OF XCL



- Decorative
- High Weather resistance
- Optimal light fastness
- Scratch resistance
- Solvent resistance
- Self supporting
- Impact resistance
- Heat resistance
- Fire resistance
- Easy to clean and maintain

- Overall light weight substructure and facade
- Sustainability
- Quick and easy to assemble
- Increased sound proofing function (up to 15 Db)
- Decrease air conditioning costs
- Provide wall protection & heat Insulation against atmospheric precipitation

ADVANTAGES OF REAR VENTILATION SYSTEM

CALCULATIONS FOR FACADE SYSTEM

Loads to be taken into consideration

The loading to be factored into calculating the façade system is worked out using the weight of the panels themselves and the wind load.

The effects of variations in temperature or humidity do not need to be taken into account when the system has been calculated and executed properly.

The installer must take into account local wind load and national building regulations

XCL RECOMMENDED PANEL WEIGHTS

Weight of the Panel = 1.4 kg/mm

WIND LOAD

Wind load is transmitted through panels to the substructure and unloaded through the supporting wall. Calculations are performed on a project basis by assigned engineers. Please contact your preferred system manufacturer or installer who will be able to provide the necessary values and calculations. Your Royalé Touché Group representative can provide contact information, if required

DESIGN

The following recommendations need to be taken into consideration:

- The minimum distance between a drilled hole and the edge of the XCL panel should be 20 mm (or 75 mm if concealed) and the maximum distance should be the panel thickness x 10.
- The minimum space between XCL panels is 6 -10 mm. The XCL panel will expand and contract at a rate of 2 mm per meter length of panel.
- The maximum distance between screws/rivets depends on the thickness of the panel.
- A minimum of 6 mm thickness is recommended for façade cladding

SETTING UP THE SYSTEM

The system should be installed by skilled and experienced fitters using the appropriate tools and equipment. The system profile should be perfectly levelled and flat, particularly when using panels of 6 mm thickness. The system manufacturer's instructions must be followed carefully especially with regard to the attachment of the parts of the profile to allow for its expansion differential for thermal loads.

XCL panels should be pre-conditioned, outdoors on site, for a period of 72 hours before installation. (The protective film should be removed from both sides of the panel simultaneously before installation.)

XCL panels, should be transported packed on the specially supplied pallets and should be stored on flat pallets and covered with a cap sheet. Care should be taken to shield the protective film on the surface of the panels from solar radiation or other heat sources during pre-conditioning and storage.

Lift the panels straight up. Do not slide the panels against each other.

FUNCTION & ADVANTAGES OF REAR VENTILATED FACADE

THE BUILDING ENVELOP

XCL installations utilising the rain screen system contribute to seven areas of the LEED credits across several LEED rating systems. In order to be recognized by these rating systems, they must have various sustainable attributes. One of the most important is the system's durability. Because of its long life span, there are no re-furbishments required and very little maintenance. Using a ventilated insulated rain screen cladding system means less material replacement and considerably lower maintenance cost over the lifetime of the building or structure.

The rain screen cladding system is used in conjunction with XCL panels for the exterior of the building enclosure. It is especially resistant to both mold and moisture build-up, which directly contributes to the quality of the living environment. It also helps insulate the exterior of a building, which helps to address any thermal bridging issues.

The biggest benefit of using rain screen systems is the temperature regulation and its ability to accommodate for the use of exterior insulation, continuous energy barrier, preventing thermal bridging which causes energy loss and building envelope inefficiency.

The ventilated rain screen cladding system, (on its own) also helps to cool the building as most of the sun's rays are reflected away. Additionally, any heat that does in fact pass through the exterior wall dissipates because of the ventilating effect of the air space between the exterior cladding (XCL) panel and the structural wall itself. Ultimately, any residual heat that penetrates the building is very minimal.

The XCL panel performs best when installed in a ventilated wall assembly also called a ventilated rain screen assembly.

The ventilation that occurs in the space behind the panel will ensure that the moisture content of the panel is the same on both the inside and the outside ensuring the panel expands and contracts evenly and does not cause the panel to buckle. This movement of air behind the panel also ensures that moisture does not build up in the insulation so preventing mould to find a habitat inside the wall.

COMPONENTS OF VENTILATED FACADE XCL sizes

Panel Sizes	1220 x 2440 mm
	1220 x 3050 mm
	*1300 x 3050 mm
	*1830 x 3660 mm
	*(Available in Selected Colours)

Thickness	6, 8 & 10 mm
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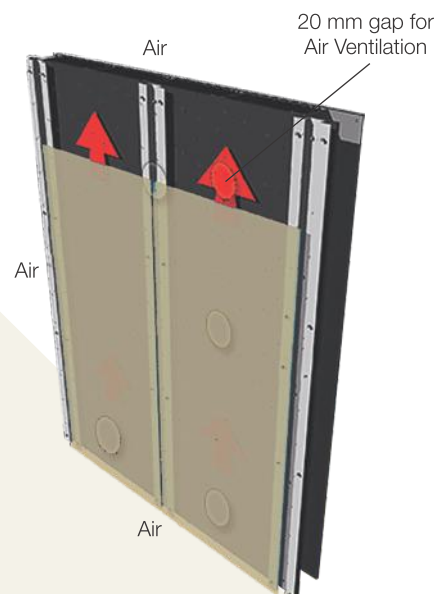
Substructure

The substructure may be made up of :

- Metallic brackets (L)
- Vertical profile (T) or Box Section

Elements used for attachment of XCL panels to the substructure

Panels are attached to the substructure using screws, rivets or other hidden attaching devices





RC 641X



RT 36



RT 26



RC 632X



RC 633X



RC 634X



RT 1414



RT 27



RC 645X



RT 972



RC 426X



RC 35



RC 43



RT 402



RC 631X



RC 404



RC 405



RC 639X



RC 640X



RC 381



RC 406



RC 407



EXP 55



RC 644X



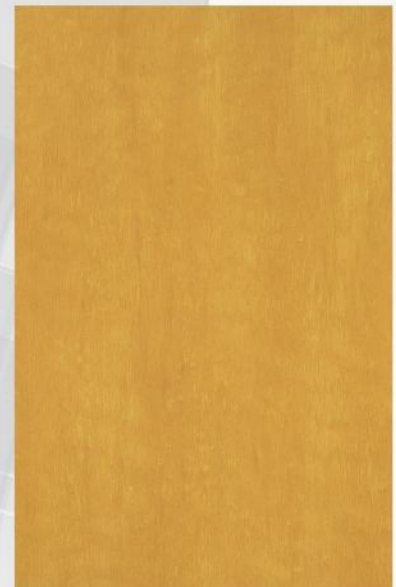
RC 642X



RT 999



RC 440



RC 635X



RC 643X



RC 425X



RT 404



RT 997



RC 646X



RC 636X



RC 637X



RC 10



RC 13



RC 17



RT 1522



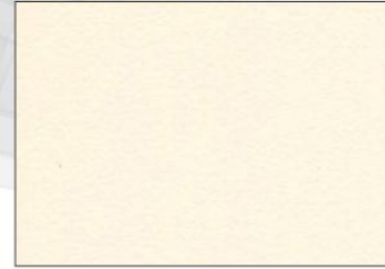
RT 1523



RT 1449



RC 611X



RC 608X



RC 22



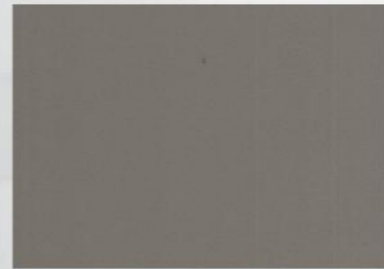
EXP 51



RT 1334



D 498



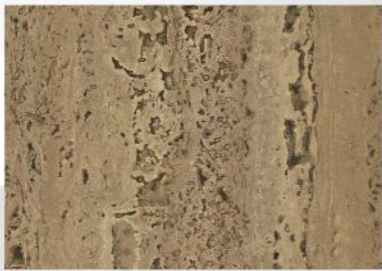
RC 615X



RC 602X



EXP 51



RT 1335



D 499



RC 610X



RC 603X



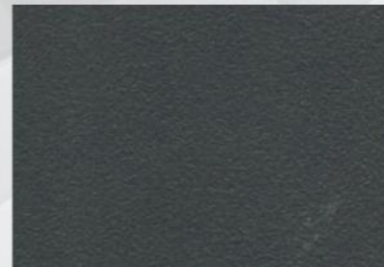
RT 1329



RT 1330



D 500



RC 604X



RC 11X



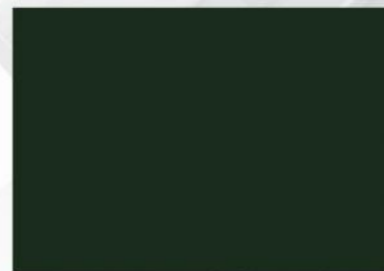
RC 19



RT 44



RT 45



RC 606X



RC 609X



RC 605X

TECHNICAL SHEET OF XCL PANEL

EXTERIOR GRADE COMPACT LAMINATE			
Sl. No.	Properties	EDF Grade Specification As per EN 438-part 6	XCL VALUES
1	Thickness mm (max.) $500 \leq t < 8.00$ mm	6.00 ± 0.40 mm	6.15 mm
2	Length mm	mm	2441.00 mm
3	Width mm	mm	1221.00 mm
4	Edge Straightness mm (max.)	1.50 mm / m	0.90 mm / m
5	Edge Straightness mm (max.)	1.50 mm / m	0.80 mm / m
6	Flatness mm (max.)		
	$2.00 \leq t < 6.00$ mm	8.00 mm / m	4.00 mm / m
	$6.00 \leq t < 10.00$ mm	5.00 mm / m	2.50 mm / m
	$t \geq 10.00$ mm	3.00 mm / m	1.30 mm / m
7	Flexural Modulus (min.)	9000 Mpa.	13966 Mpa.
8	Flexural Strength (min.)	1.50 mm / m	114 Mpa.
9	Tensile Strength (min.)	1.50 mm / m	66 Mpa.
10	Density, gm. / cm ³ (min.)	1.50 mm / m	1.45 gm. / cm ³
11	Resistance to impact by large diameter ball,		
	a) Drop height mm (min.)		
	$2.00 \leq t < 5.00$ mm (t = nominal thickness)	1400.00 mm	1600.00 mm
	$t \geq 5.00$ mm	1800.00 mm	2000.00 mm
	b) Indentation dia. mm (max.)	100.00 mm	6.00 mm
12	Resistance to wet conditions		
	a) Mass increase % (max.)		
	$2.00 \leq t < 5.00$ mm (t = nominal thickness)	10%	4%
	$t \geq 5.00$ mm.	8%	3%
	b) Appearance not worse than	Rating 4	Rating 5
13	Dimensional stability at elevated temperature,		
	$2.00 \leq t < 5.00$ mm (t = nominal thickness)		
	a) Longitudinal % (max.)	0.40%	0.25%
	b) Transverse % (max.)	0.80%	0.45%
	$t \geq 5.00$ mm		
	a) Longitudinal % (max.)	0.30%	0.20%
	b) Transverse % (max.)	0.60%	0.40%
14	Resistance to climatic shock		
	a) Appearance	Rating4	Rating 4
	b) Flexural Strength index (min.)	0.95	1.10
	c) Flexural modulus index (min.)	0.95	1.50
15	Resistance to artificial weathering (Including Light fastness)	After 650 MJ / m ² radiant	3000 hrs passes
		Exposure (3000 hrs)	
	a) Gray scale rating (not worse than)	Rating 3	Rating 4
	a) Gray scale rating (not worse than)	Rating 4	Rating 4
16	Resistance to UV light	Ater 1500 hrs Exposure	1500 hrs passes
	a) Gray scale rating (not worse than)	Rating 3	Rating 4
	b) Appearance (min.)	Rating 4	Rating 4
17	Spread of flame	Class I	Class 1

Remark: E (Exterior Grade), D (Severe use), F (Flame Retardant Grade)



DECLARATION OF PERFORMANCE

We, CROWN LAMINATES INDIA PVT. LTD., declare under our sole responsibility that the performance of the product identified at S. No.1 below is in conformity to the declared performance in serial No.9 below. This declaration of performance is issued under our sole responsibility as a manufacturer of this product.

According to Construction Products Regulation EU 305/2011

1	Product-type	High Pressure Laminates, Type : Compact Laminate for Wall Application (Internal & External)		
2	Name, Registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5)	CROWN LAMINATES PVT. LTD. 419/1, Radhe Industrial Estate, Tajpur Road Village-Changodar Ahmedabad		
3	Systems of assessment and verification of constancy of performance of the construction product	System 3		
4	Name and address of the Authorized Representative	MS. ARPITA PATEL 6, Patel Avenue, 1st Floor Near Gurudwara, S.G. Highway Ahmedabad 380059		
5	Name and address of the notified body	APPLUS LABORATORIES Lgai Technological Center, S.A. Campus UAB S/N Ronda De La Font Del Carme, S/N E-08193 Bellaterra (barcelona) INSTITUTE FOR TESTING AND CERTIFICATION Trida Tomase Bati 299, Louky, 76302 Zlin Czech		
6	Number of Harmonized standard(s) applied	EN 438-2 : 2005 EN 438-4 : 2005 EN 438-6 : 2005 EN 438-7 : 2005		
7	Number of a specific technical documentation, where applicable	TEST REPORT No : 14-8210-570 dted September 26th 2014 TEST REPORT No : 14-8274-382 PART 1 dted July 08th 2014 AQS PROJECT No : 90439-01 dted July 13, 2012 AQS PROJECT No : 90439-02 dted July 13, 2012 AQS PROJECT No : 90439-07 dted Jan 07, 2013 TEST REPORT No : 75 35 01221K / 2015		
8	Intended use, in accordance with the applicable harmonized technical specification	HPL Compact panels of thickness 4 mm to 20 mm for internal and external wall applications		
9	List of essential characteristics, as determined in the EN 438-7:2005 for the declared intended use.	Resistance to Fixing	EN 438-7 Clause 4.5	Pass
		Direct airborne sound insulation	EN 438-7 Clause 4.6	NPD
		Bonding strength	EN 438-7 Clause 4.7	NPD
		Flexural tensile	EN 438-7 Clause 4.8	Pass
		Thermal resistance / Conductivity	EN 438-7 Clause 4.9	NPD
		Release of formaldehyde	EN 438-7 Clause 4.11.1	Pass
		Thermal shock resistance	EN 438-7 Clause 4.12.1	Pass
		Durability	EN 438-7 Clause 4.13.3	Pass
10	Safety Data sheet according to the REACH Art. 31 and/or information on substance in construction product (REACH Art.33) as relevant	REACH regulation not applicable as product-type in S. No.1 is an Article as defined by REACH regulations		



Date: 05.06.2015

CERTIFICATE OF AUTHORIZATION

This is to certify that **Euro Woods & Timbers Pvt Ltd (A unit of Straton Group)** with office address at #146, Sydenhams Road, Periamet, Chennai 600003, TN, India who have been in the business of contract manufacturing and supply of **Exterior & Interior finishing building materials** since 2001 exclusively represent and upkeep our institutional, project sales and exports for **High Pressure Laminates (UV grade)** for exterior applications.

We hereby confirm the above mentioned with the signature below on this document.

For, Crown Laminates Pvt. Ltd.

Authorised Signatory

CROWN LAMINATES PVT. LTD.

106, 1st Floor, Patel Avenue, Near Gurudwara, S.G. Highway, Ahmedabad-380 059, Gujarat (India)
Phone : 079-4001 7979 • Fax : 079-4001 7900 • E-mail : crownlam@gmail.com

Factory : 419/1, Radhe Industrial Estate, Tajpur Road, Village : Changodar - 382 213, Dist : Ahmedabad, Gujarat, India.
CIN: U36101GJ2009PTC058631



AN
ISO9001
CERTIFIED
COMPANY



EURO WOODS & TIMBERS PVT LTD

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