

ROYALÉ TOUCHÉ
XCL Xterior
Compact
Laminate

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*The New Frontier
of Facades*

ROYALÉ TOUCHÉ
XCL Xterior
Compact
Laminate



The Edge of Perfection

Royalé Touché is a name synonymous to elegant perfection. Our laminates are optimal blends of style & strength standing tall against the test of time. What differentiates us from other surfacing solutions is our touché of unmatched excellence.

Our laminating finesse transcends your facades to a class apart, a cut above, an edge ahead of all others.

In the line of our exceptional laminating solutions, we present a new range of Exterior Compact Laminate Panels (XCL)



An Elegant Touché of Class & Comfort

We Royalé Touché firmly believe in a customer-centric philosophy. Our key focus is not on selling our products but rather ensuring that these products continually add class, elegance, design and comfort to our client's architectural and decoration needs. For us, adapting ourselves perfectly to the design of a project is an essential requirement. That is why we are committed to innovation and a continual quest for architectural solutions leading to warm and comfortable spaces.

Since last 40 years, we have been the pioneers in introducing the trendiest and most innovative architectural solutions in the industry.

Today, Royalé Touché has distinguished itself as a leader in the premium architectural space with a presence in over 40 countries around the world.





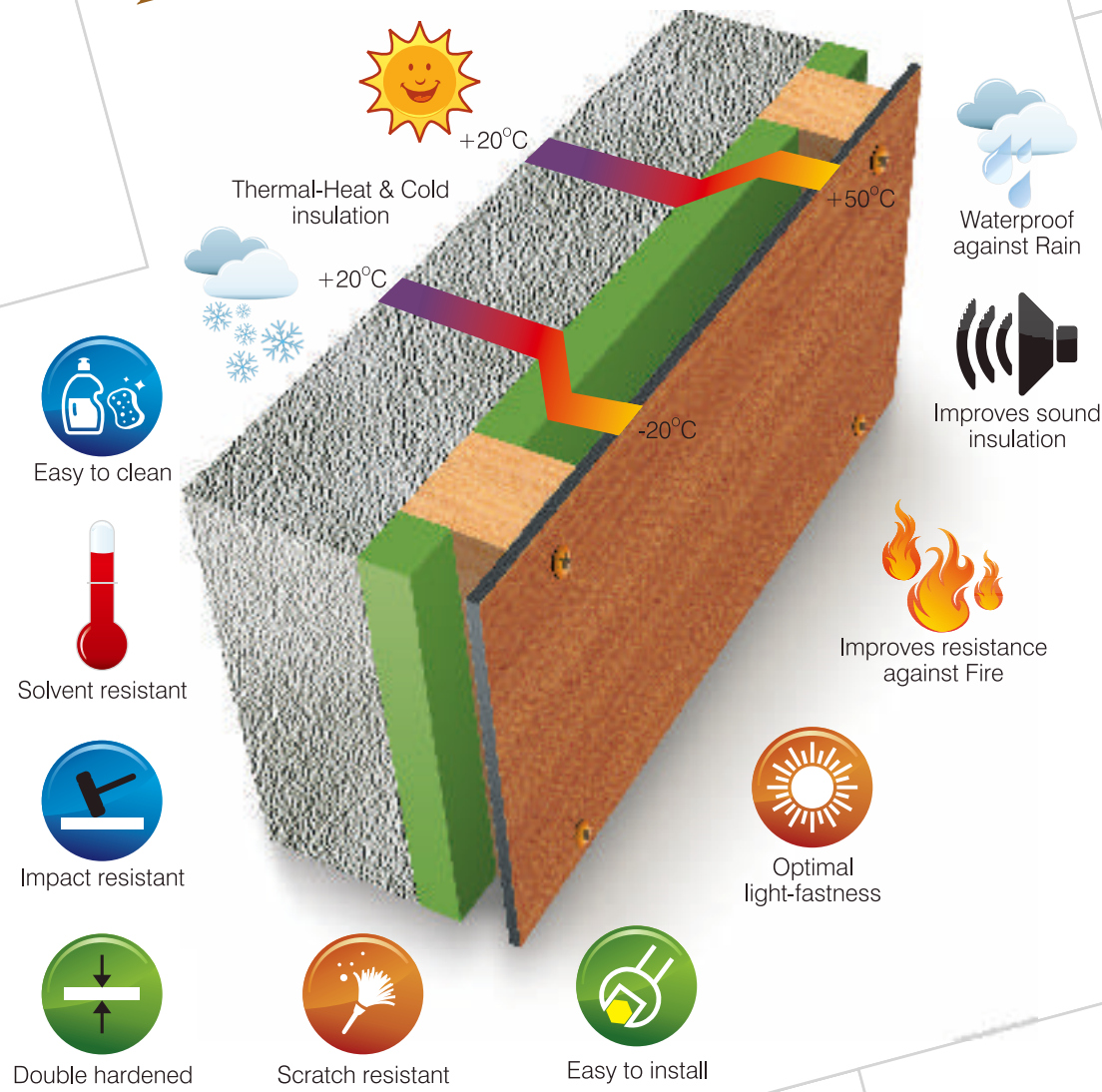
What are Exterior Compact laminates?

Exterior compact laminates as the name suggests is the ideal product for exterior applications made from Kraft Paper and Decorative Paper. It is produced under high pressure and high temperature. Hardened resins provide effective weather protection which makes it capable of withstanding erosion from natural elements. It comes with high UV Resistance which makes it ideal for exterior facades cladding.

Exterior Grade Compact Laminates make the perfect cladding material for buildings requiring ventilated facades. It is resistant and sustainable, easy to machine and install, offering a myriad array of decorative possibilities.



Manifold Benefits of Exterior Laminates



- Decorative
- High weather resistant
- Optimal light fastness
- Scratch resistant
- Solvent resistant
- Self supporting
- Impact resistant
- Easy to maintain
- Heat resistant
- Fire resistant
- Free from heavy metals
- Sustainability
- Easy rapid installation & repair procedure
- Increased sound proofing function (upto 15 Db)
- Decreases air conditioning costs
- Low cost maintenance
- Provide wall protection & heat insulation against atmospheric precipitation





Abundant Applications

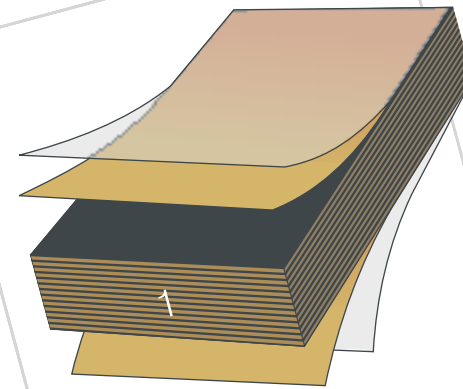
Exterior compact laminates have a variety of external applications. They can be optimally used in the following spaces:

- BALCONIES WINDOW PANELS
- EXTERIOR WALL-CLADDING
- OF HOUSES OFFICE BUILDING
- FENCES RAILS & SCREENS DUCT
- COVERING LOUVERS SIGNAGE
- PEDESTRIAN SHELTERS KIOSK
- PREFAB HUTS VENTILATED
- FACADES SOFFITS
- ROOF CLADDING LETTERING
- CLADDING MEMBERS
- FOR GATE & GARAGE



Facades: The Exclusive Range

Royalé Touché XCL is apt for use as a ventilated facade. It is available in several sizes in order to optimise utilisation. It is tailored with three thicknesses and various decors that have been specifically selected for this application.

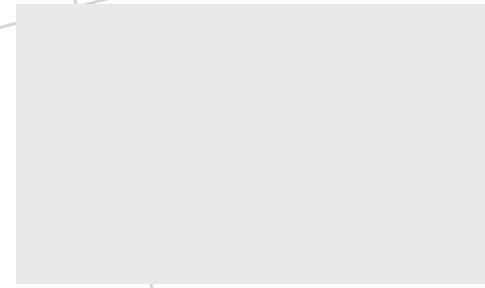


- Phenolic core: The quantity of Kraft paper that are impregnated with phenolic resin.
- Decorative paper sheets with surface protection for external use.

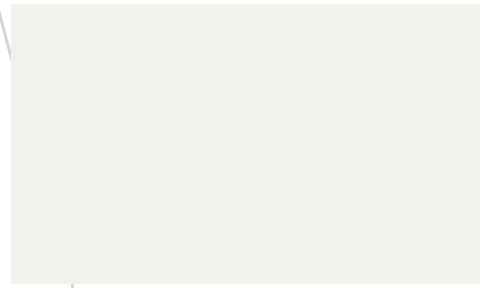
Sizes	1220 x 2440 mm • 1220 x 3050 mm 1300 x 3050 mm (Available in Selected Colours)
Thickness	6, 8 & 10 mm
Decor	Both Side Decor
Finish	SF (Suede finished)
Standards	Complying to EN 438-6



Colour Collection



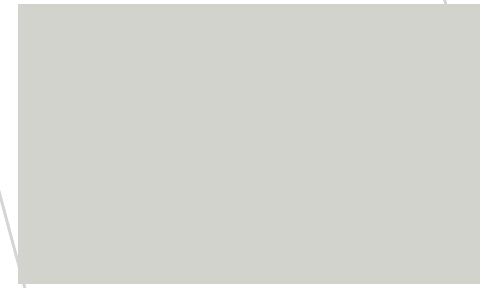
C-10



C-13



C-17



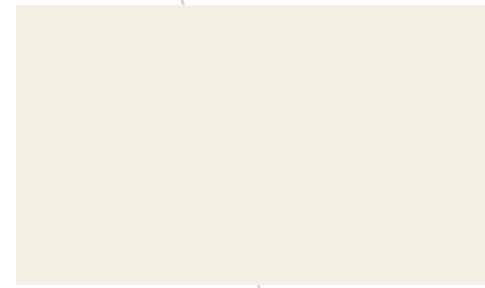
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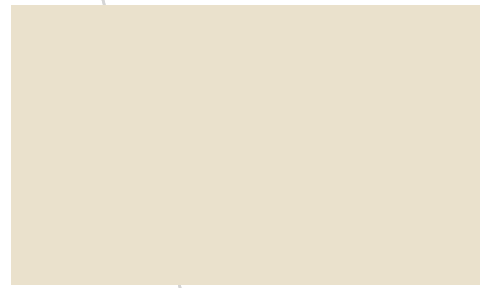
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604 X



611 X



608 X



C-1132



606 X



C-19



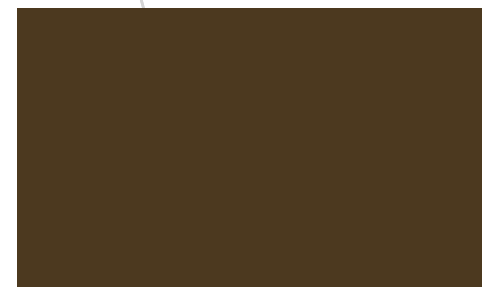
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C-22



T-230



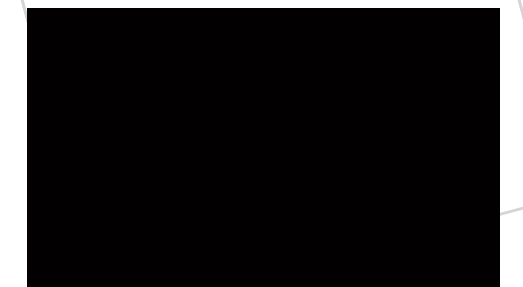
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T-155



T-207



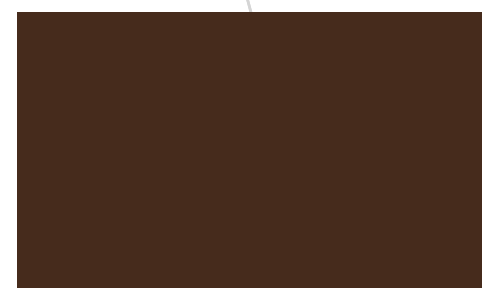
C-11



T-053A



610 X



23 X



609 X



T-216





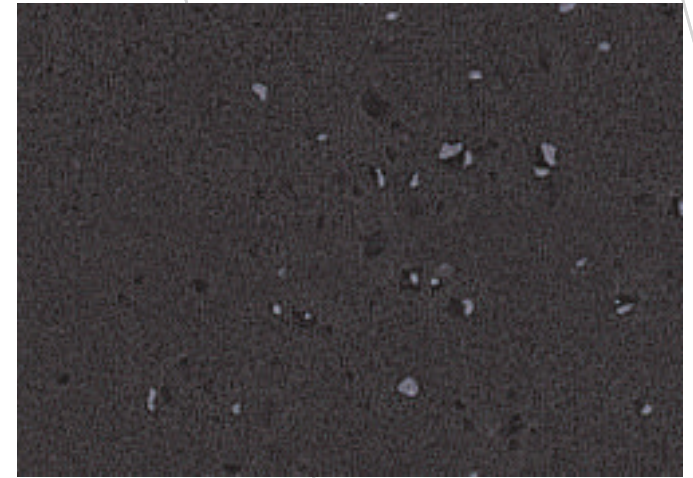
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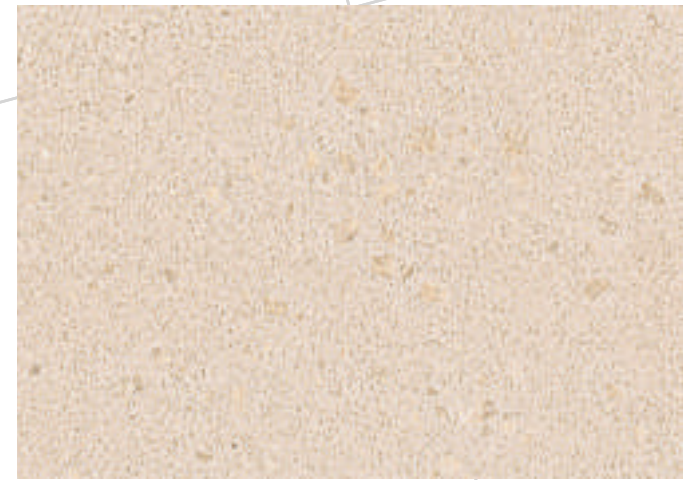
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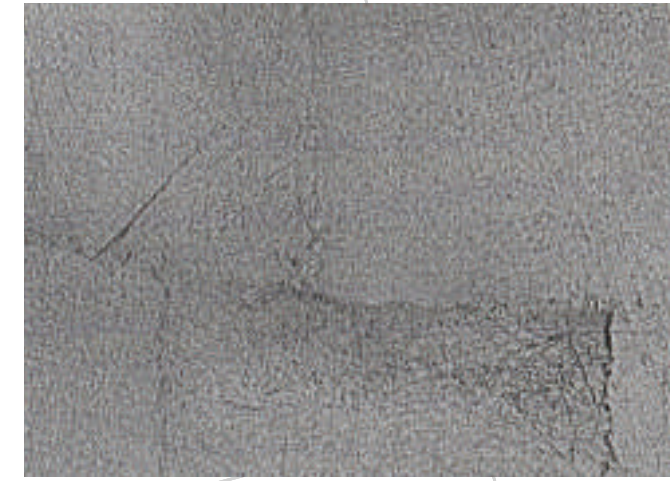
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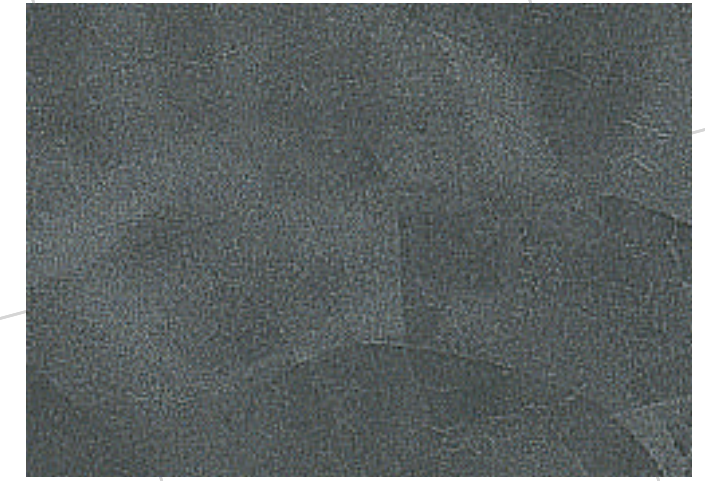
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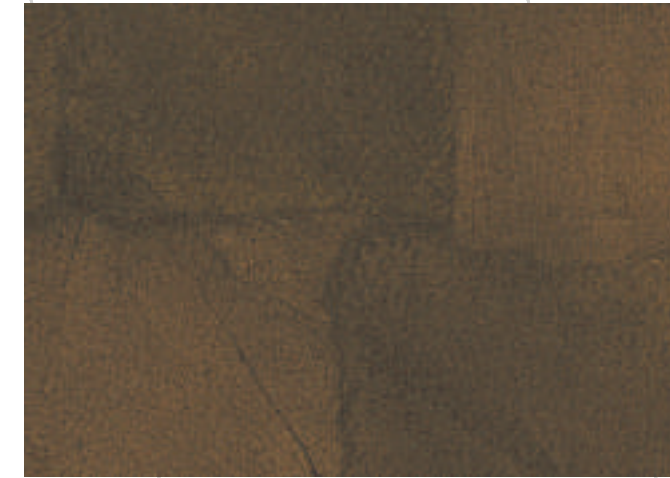
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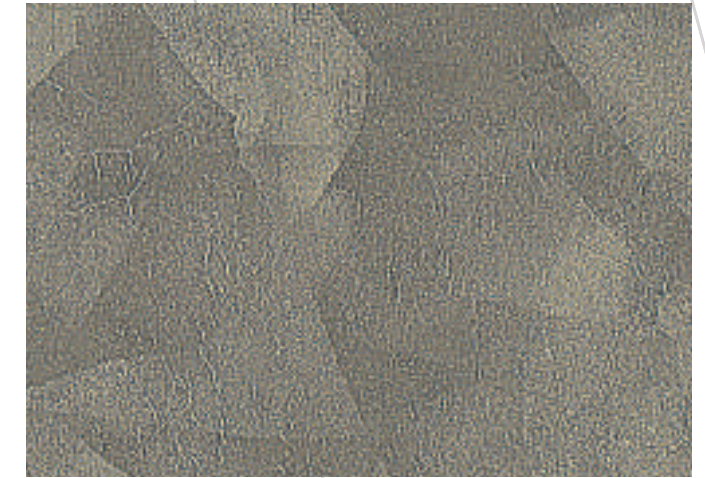
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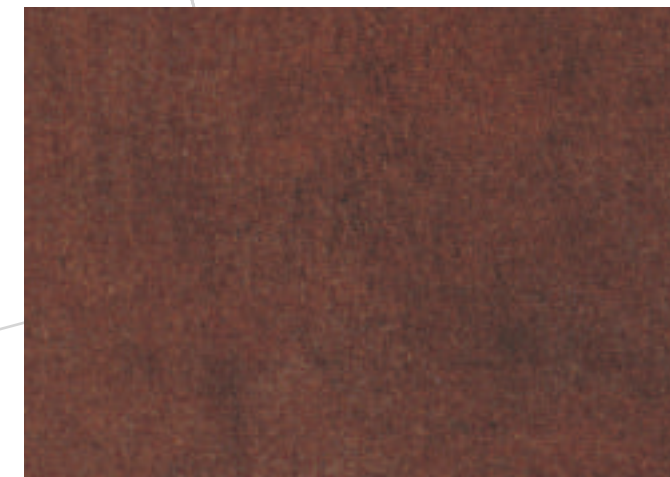
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T-1417



T-713



T-797



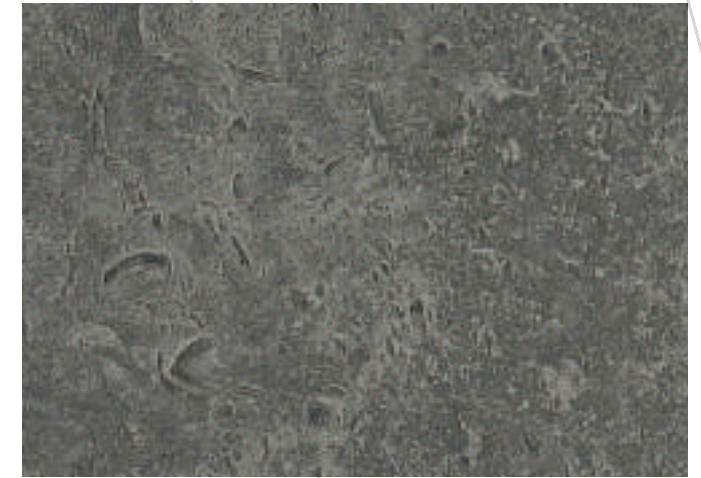
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T-1374



T-1422



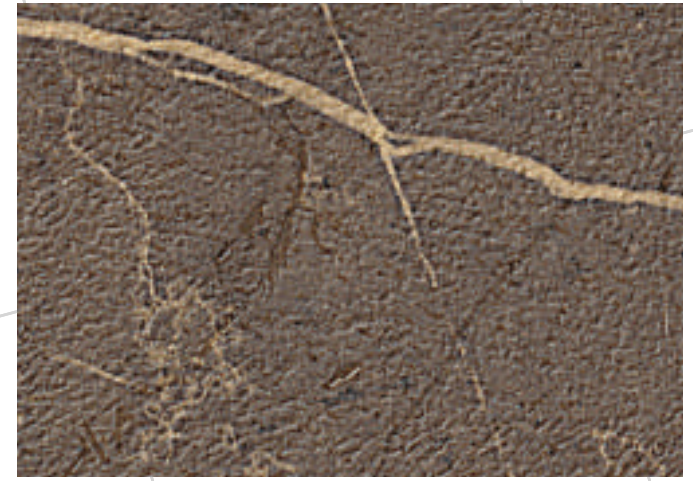
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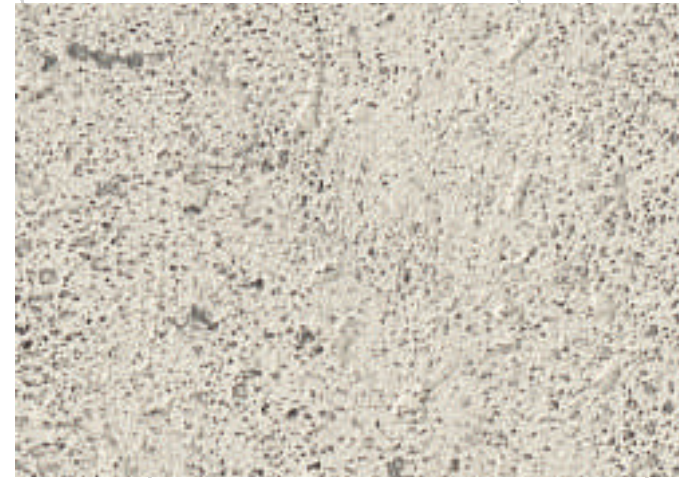
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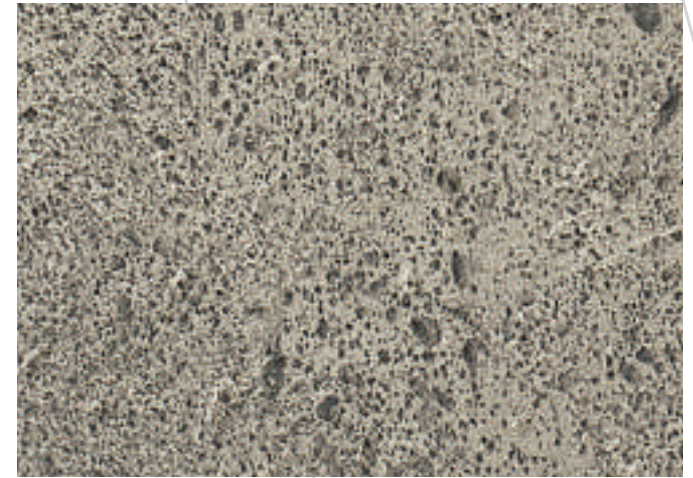
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T-1330



T-1445



T-1446



T-1396



T-1400



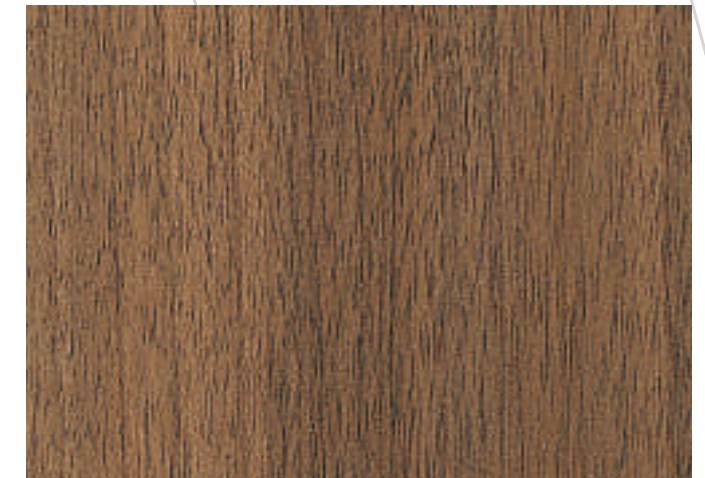
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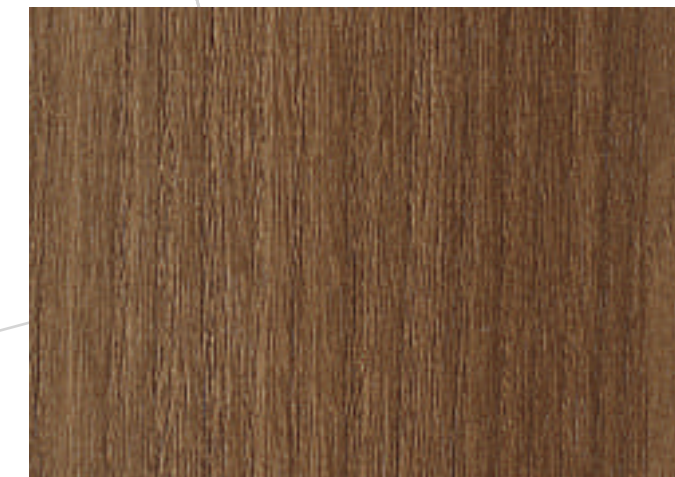
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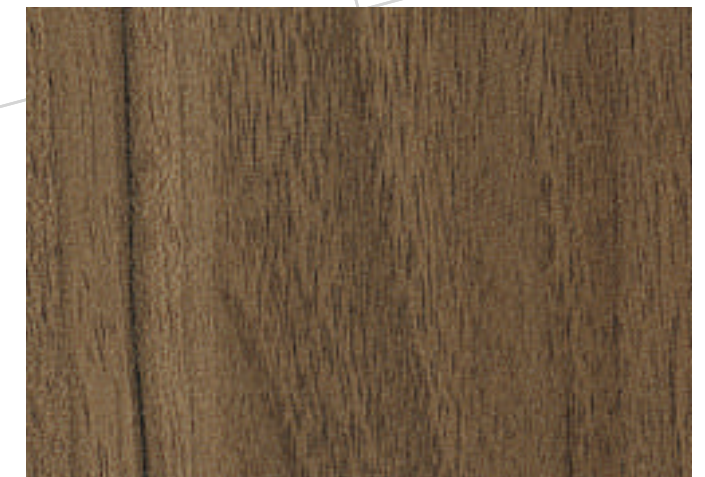
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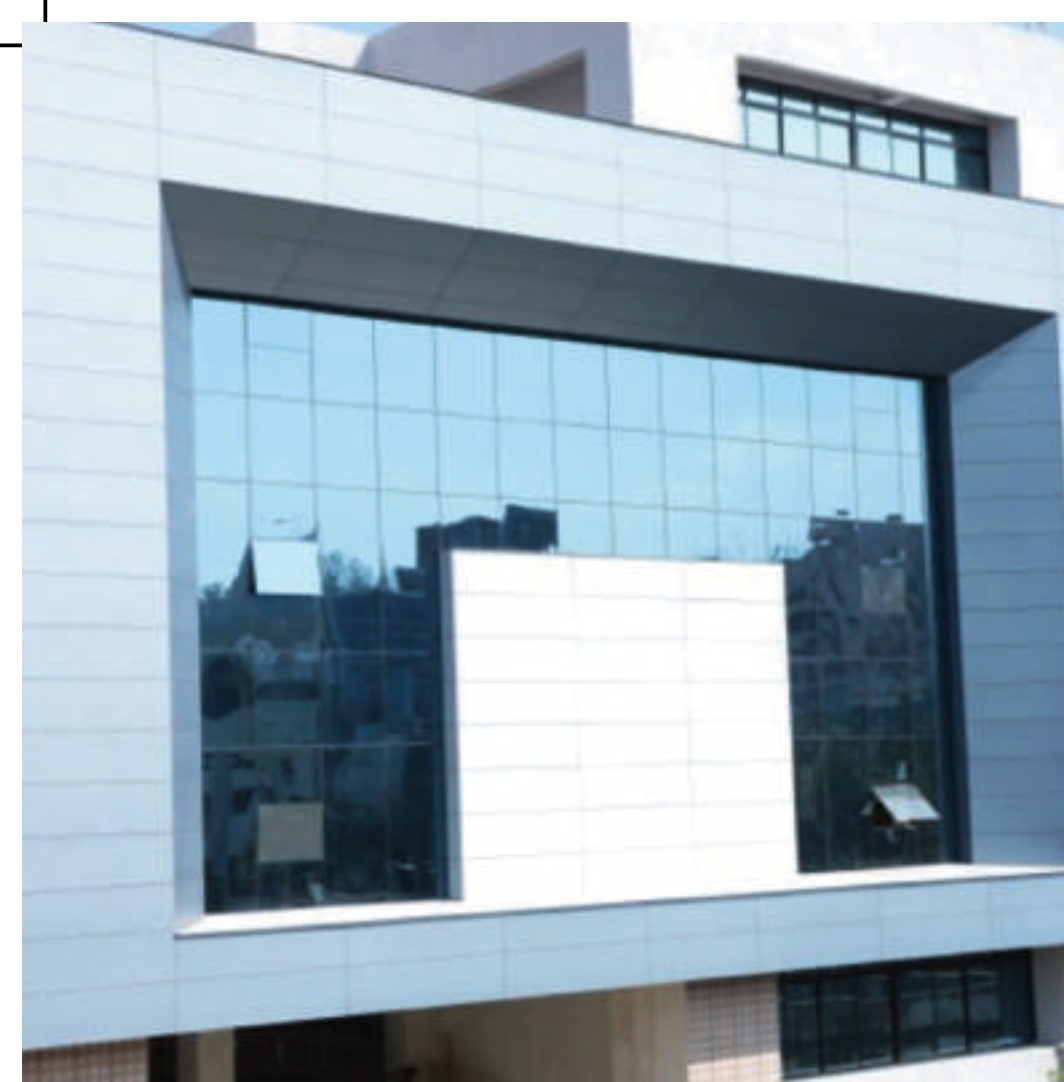
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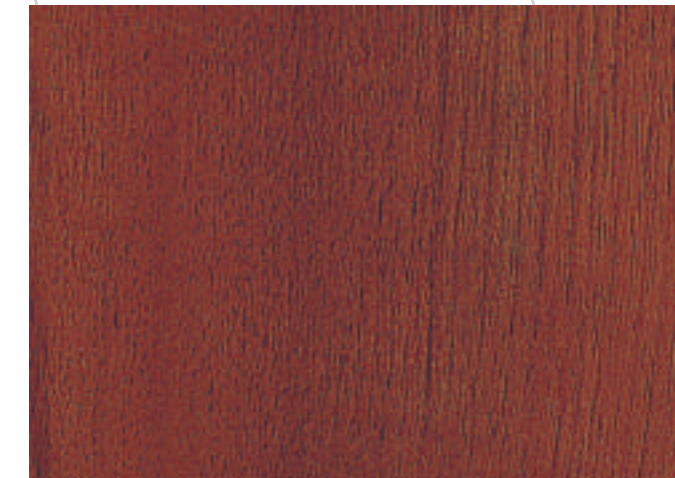
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RC-46



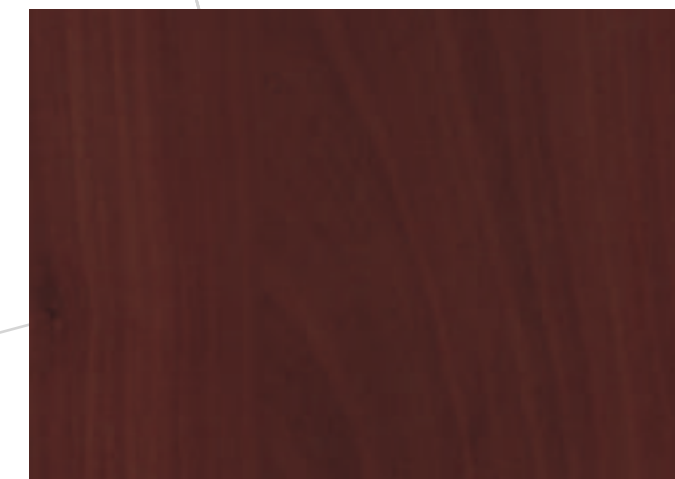
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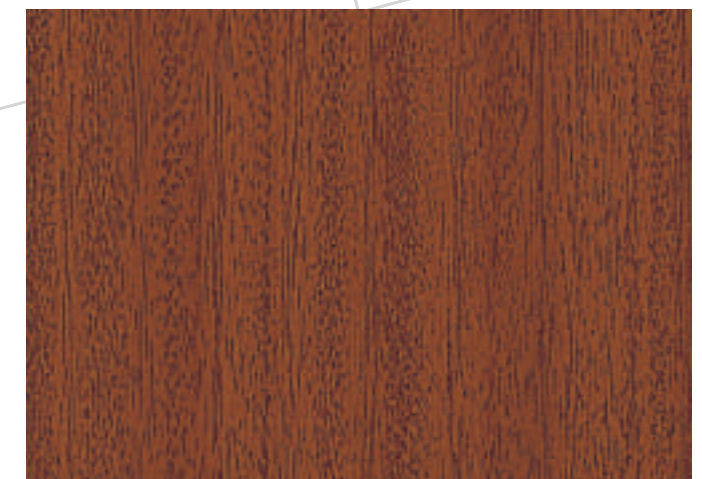
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T-882



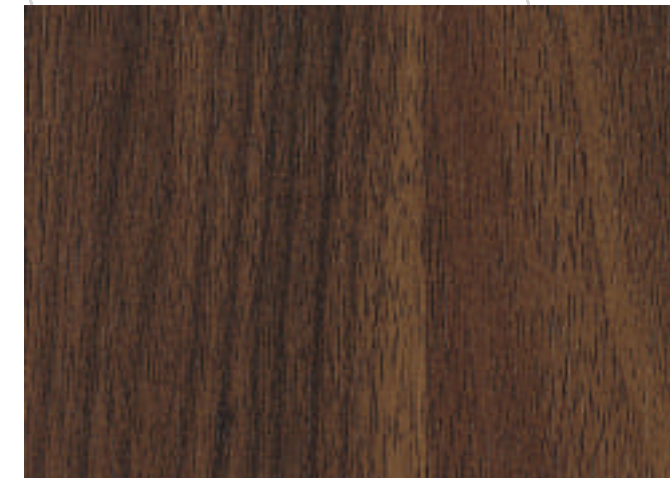
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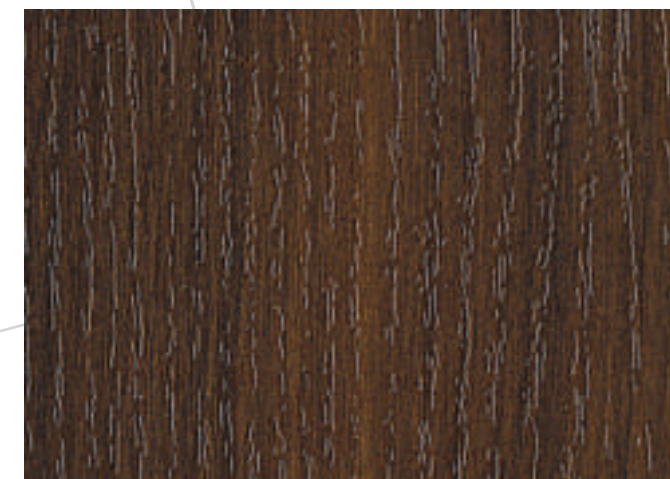
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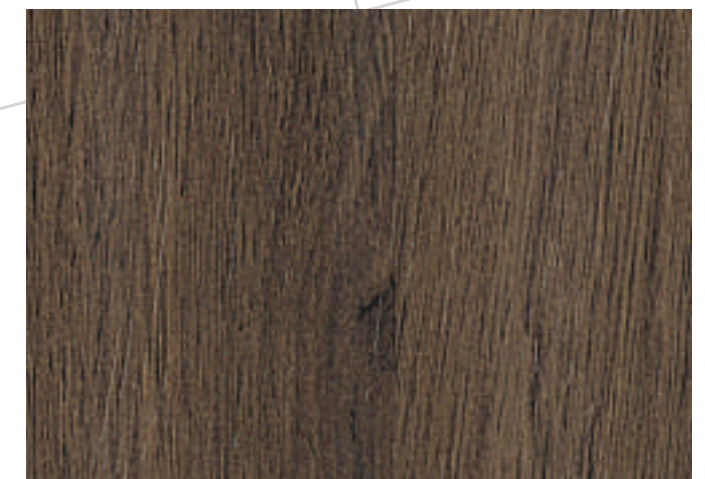
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T-940



T-41



T-51





T-1447



T-1436



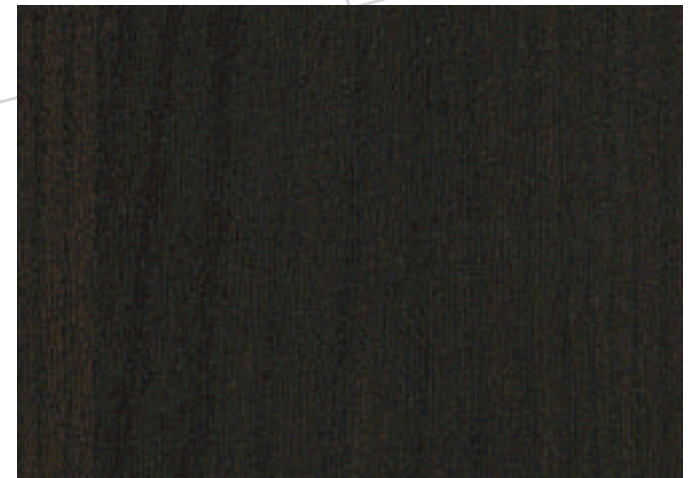
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C-219



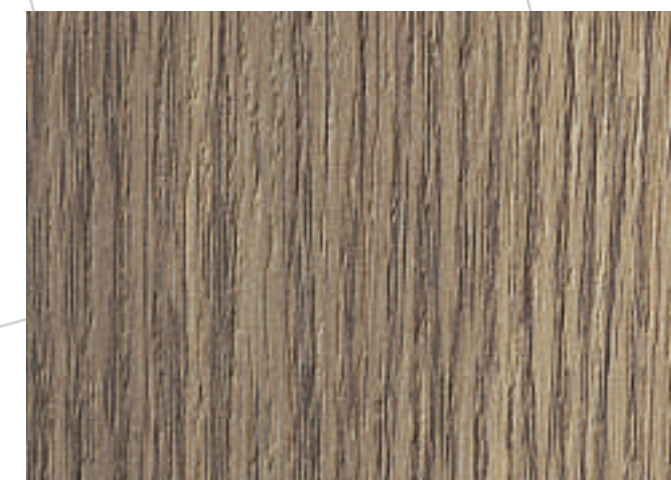
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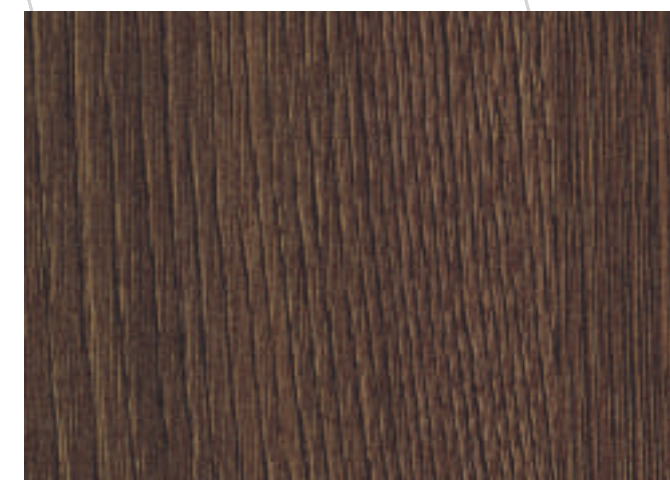
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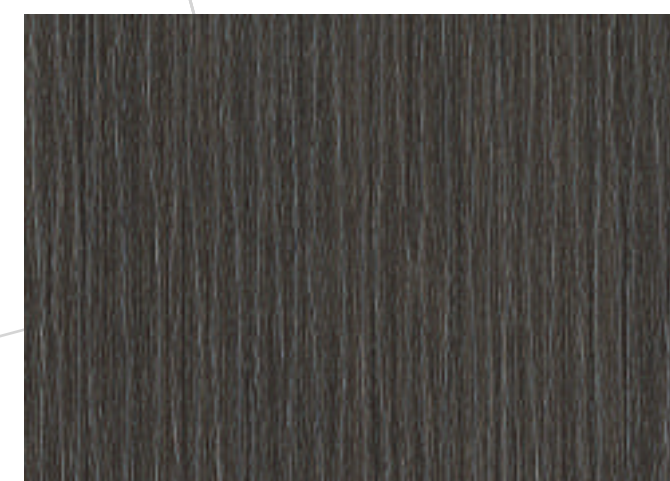
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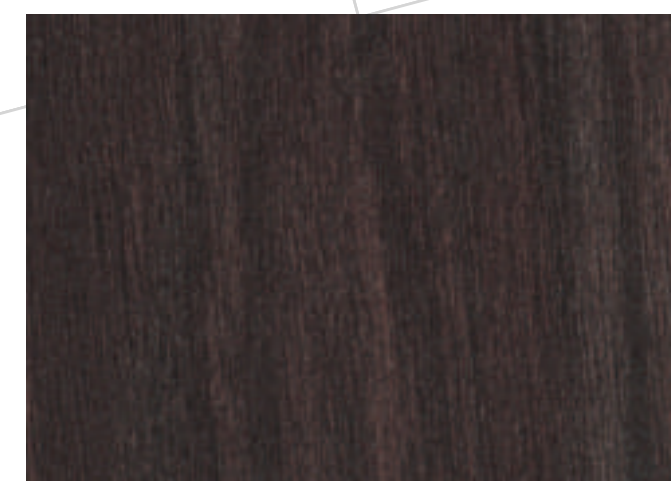
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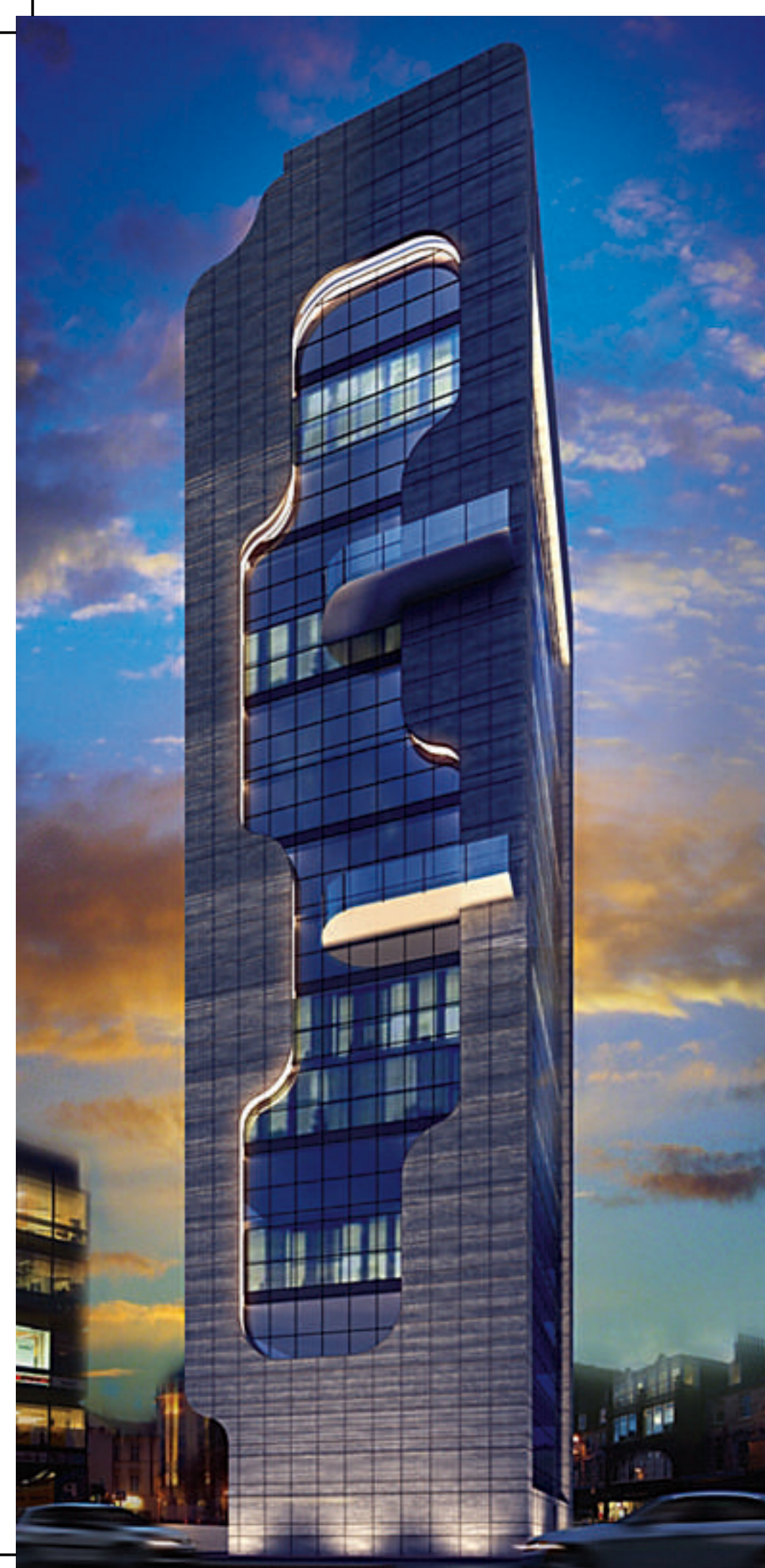
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T-1342



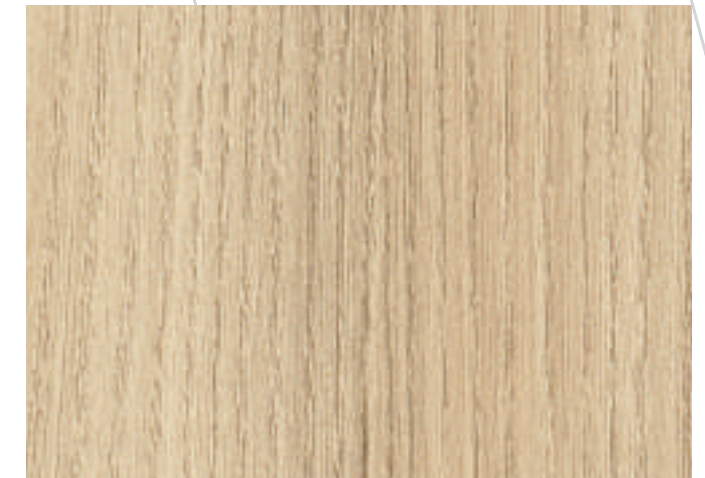
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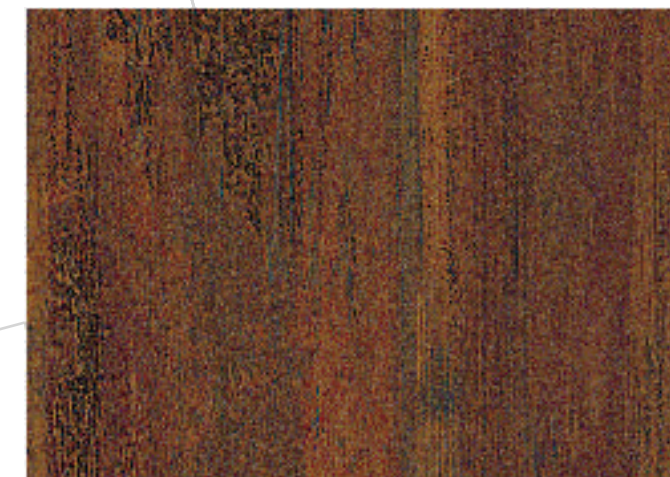
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T-1454



T-34



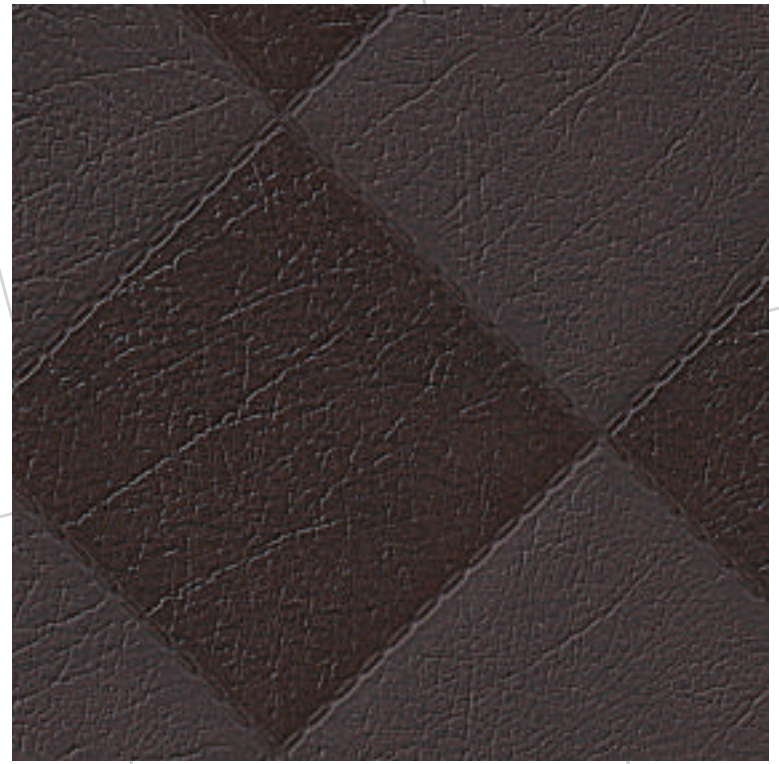
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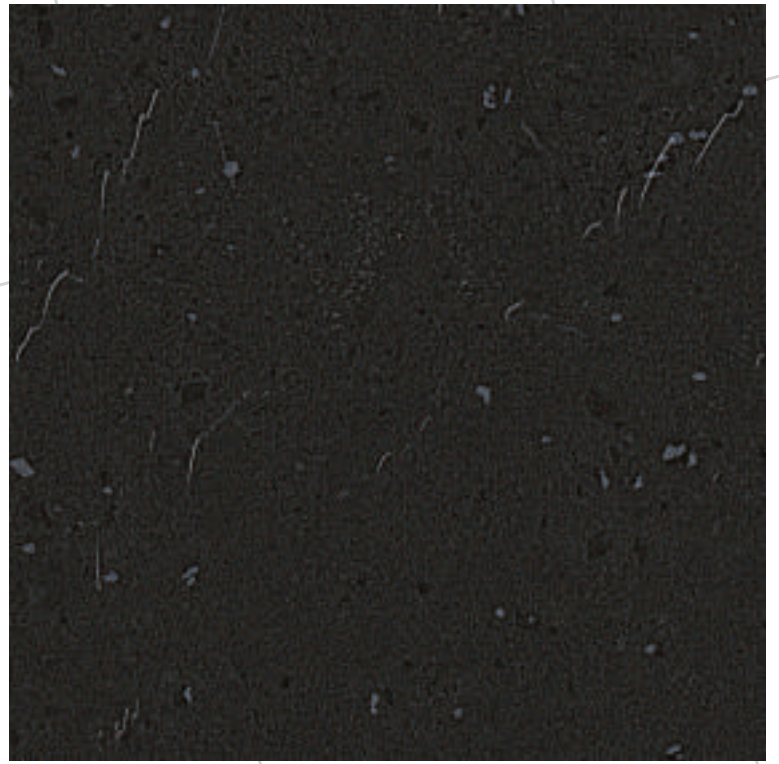
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Finishes



DL-1370



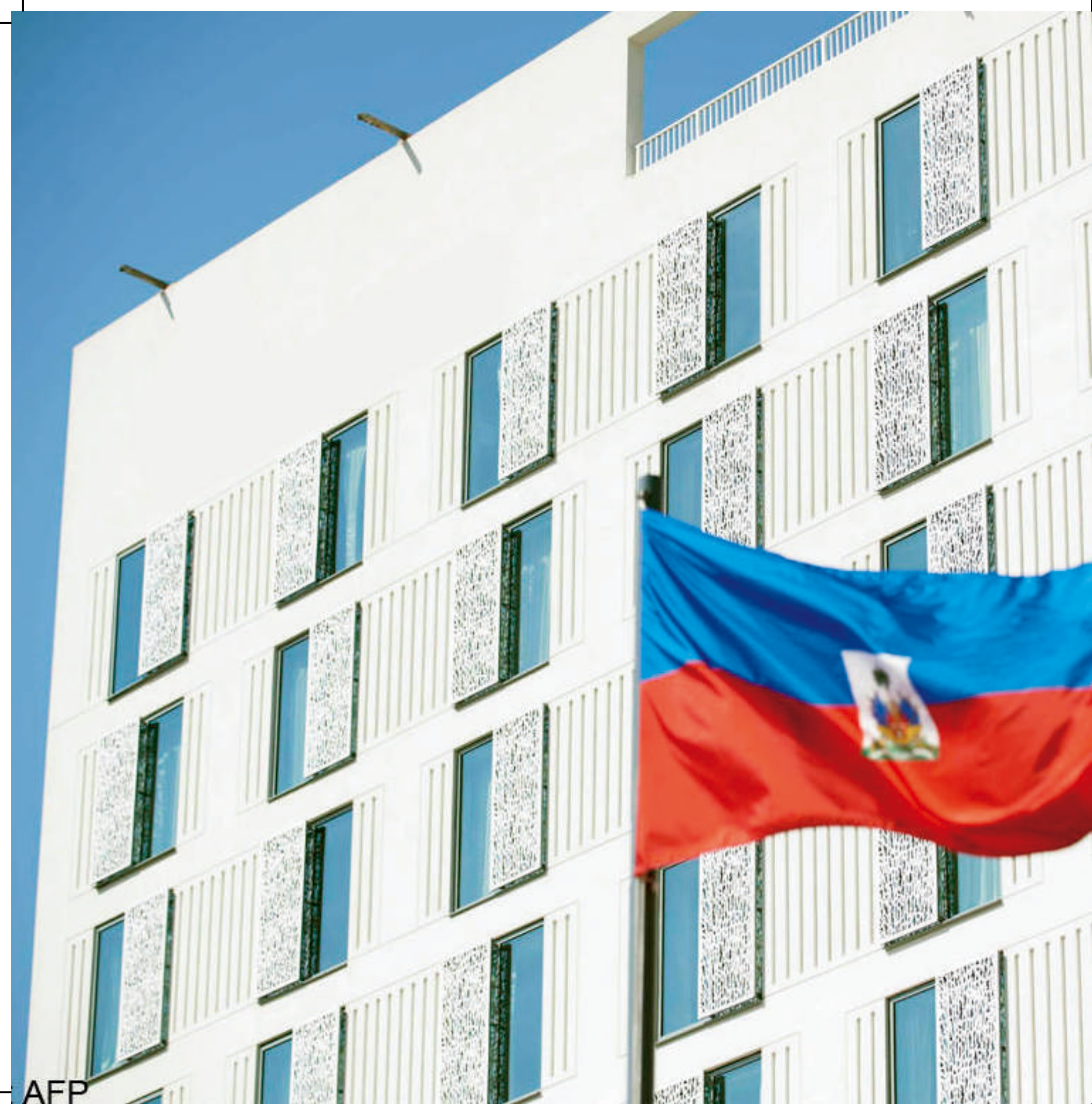
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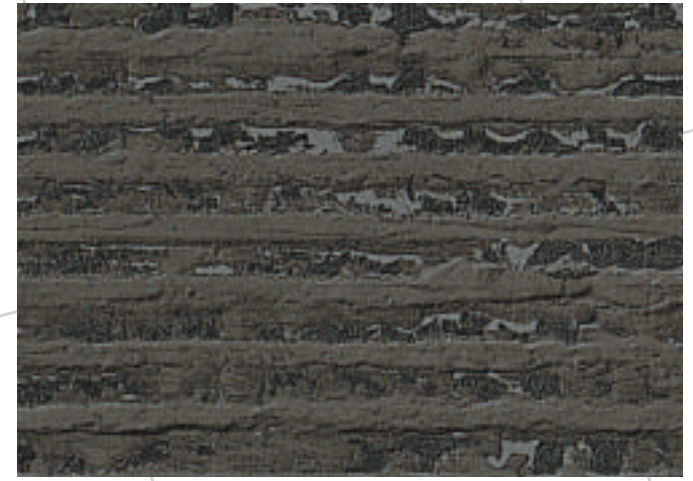
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GS-1330



T-1477



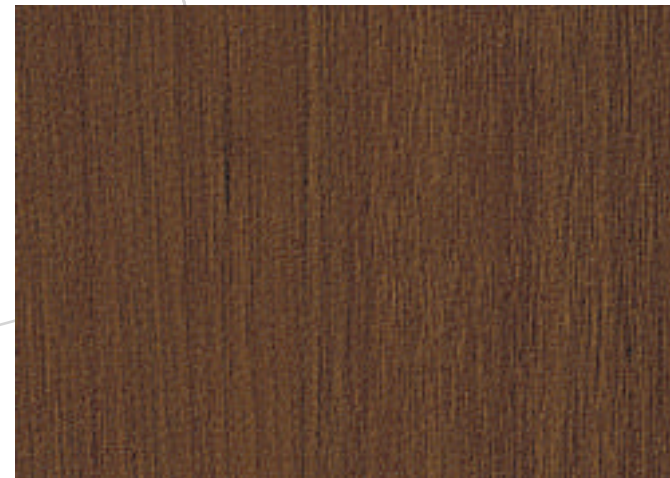
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T-1474



T-1476



R-381



R-163



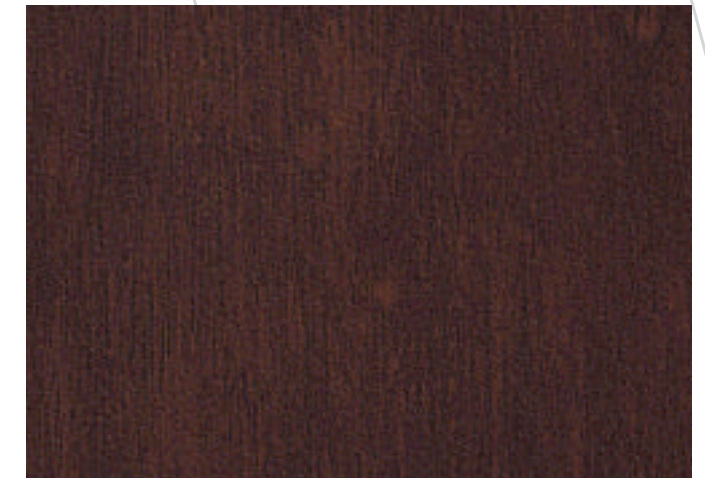
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632 X



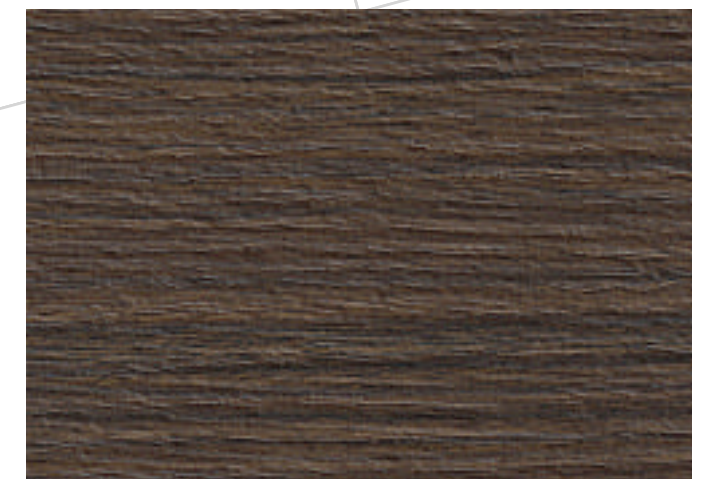
633 X



634 X



635 X

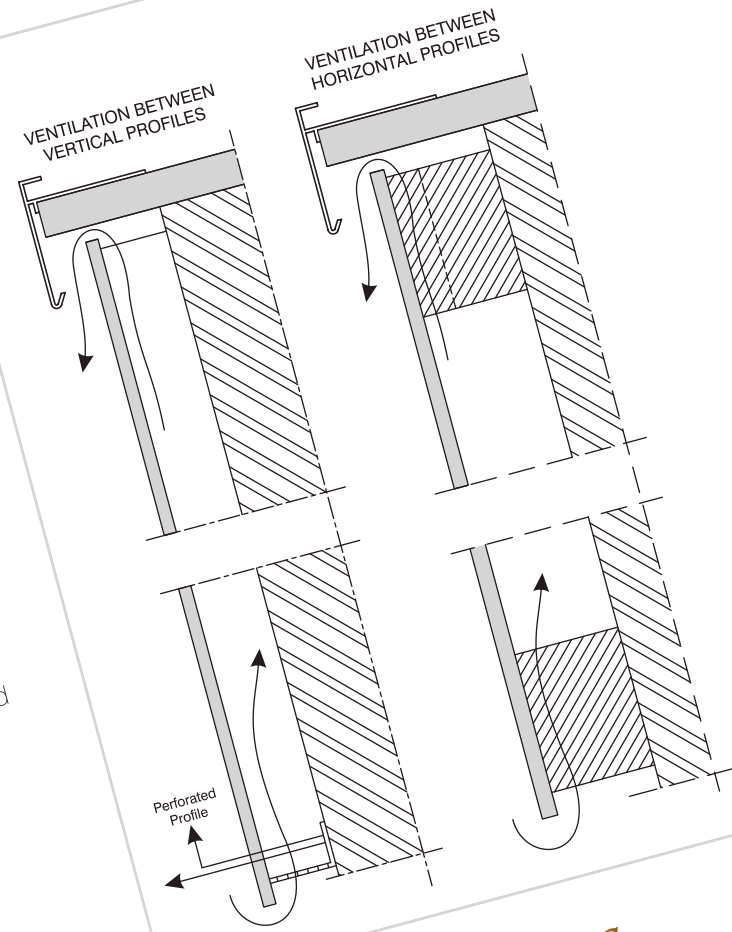


T-1472

Guidelines for Installation Systems

Air Circulation

An efficient air circulation must be secured between Royale Touché XCL compacts and the surface or the coating of the building. The blank grouting spaces allowed for ventilation between the plates should not be filled with any material. An efficient air circulation must be provided from the ground level of the plate to the top edge. A minimum of 50 cm² space is required for every 1 meter width. If no air ventilation gap is reserved at the construction framework, deformation will occur on the exterior plates.



Expansion Spaces

The varying degree of moisture in the atmosphere changes the dimensions of the XCL ever so slightly. In humid weather conditions, the plates enlarge whereas shrinkage occurs in dry conditions.

The humidity and heat do not always change in the same direction, opposite movements may occur. Therefore leaving expansion spaces between the plates is an absolute requirement. The diameters of mouthpieces drilled for screws, bolts and rivets must be 2-3 mm larger than the diameters of the screws.

All hidden screw systems, spaces must be on the construction framework. There must be no silicone used during the grouting process.

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Joints

The glue mastic should be applied maximum 2 cm from the edge in continuity and maximum 5 cm from the edges at screw installations. Rivet and screw distance must be minimum 20 mm in between and for hidden screw and hang systems, the distance between screws must be at least 80 mm.

Framework Partition Space

The partition space depends on laminate thickness. For 6 mm thickness, the vertical framework space should be maximum 550 mm. The windload should be calculated according to the location and height of the application. If necessary additional supportive elements must be utilised at the centre and back of the plates.

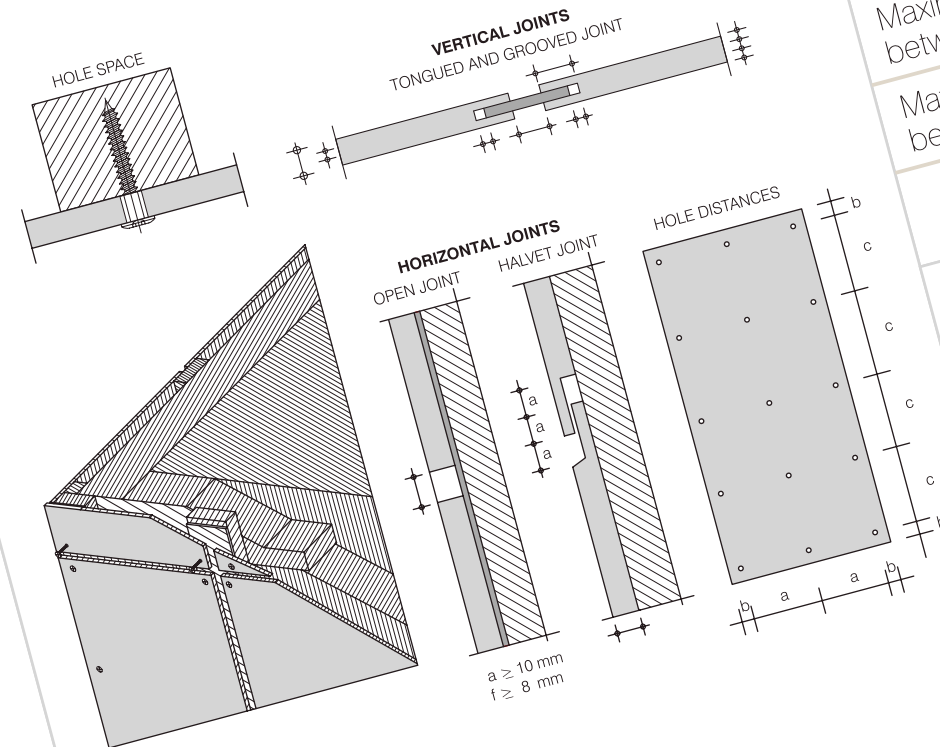
Rivet And Screw System

For 6 mm and 10 mm panels, rivet and screw system is suitable. This system is also used for supporting the adhesive systems on high rise buildings to increase the security.

Joint spaces and vertical profile spaces are similar with the adhesive system. Open joint, halvet joint and male/female joints are usually used in joint spaces.

The mouth piece drilling on the centre of the plate is opened with the same diameter as the rivet., other holes are opened 3 mm wider than the rivet and screw diameters, thus enabling movement of plates in case of expansion. The placement of the holes should be minimum 20 mm distance from the plate edge and distance maximum 10 times of the plate thickness.

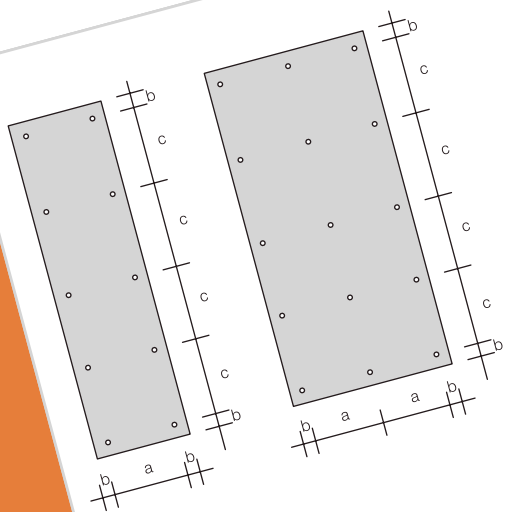
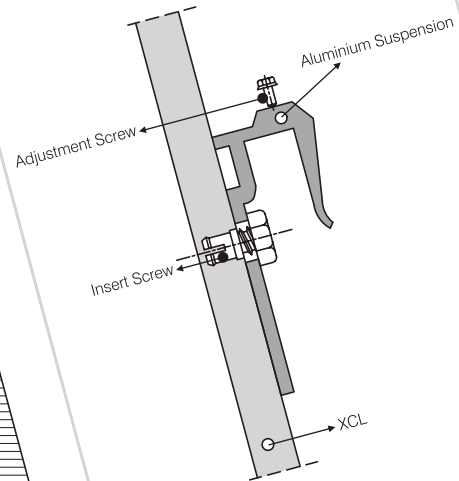
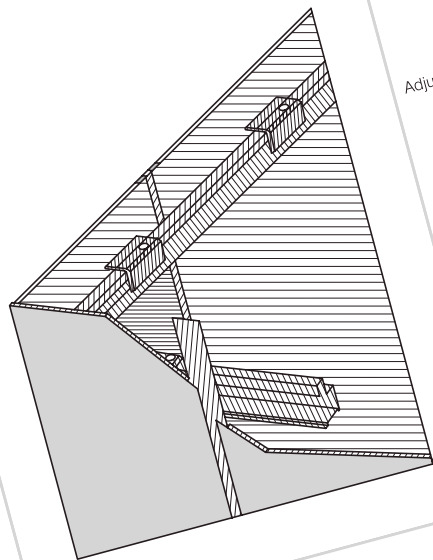
Thickness of Sheets	6 mm	8 mm	10 mm
Minimum distance of holes to edge	20-10 mm	20-80 mm	20-100 mm
Maximum distance between the holes-width	450 mm	600 mm	750 mm
Maximum distance between the holes-length	550 mm	750 mm	900 mm



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Suspension (Hanging) System with Hidden Fixing

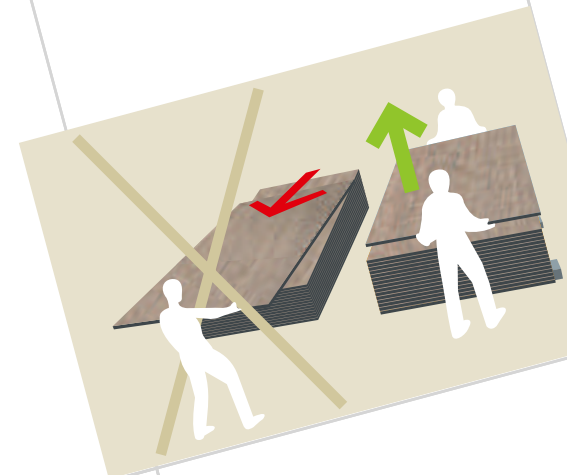
This system is suitable for exterior panels of 8 mm, 10 mm and 13 mm thickness. Suspension components are screwed from the back of the panel, therefore invisible from the front. This system is the most secure application for the high rise buildings, enabling easy adjustment of the plates during installation however the most costly method in terms of accessories and labour.



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Handling

When handling it is recommended to lift each board separately to minimize the risk of scratching the decorative faces against each other. Compressed air lifting machine can be used.



Palletisation and storage conditions

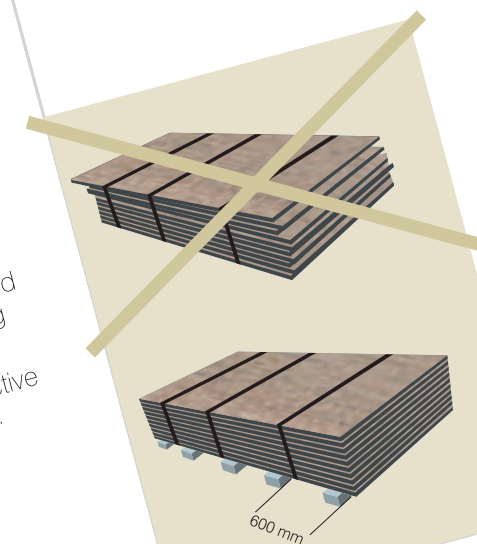
One should transport the sheets on pallets of sufficient size and rigidity. Bearers should be maximum of 600 centres.

The sheets must be stored in dry premises, under cover to avoid excess of humidity and heat.

When storing horizontally on pallets, place a protective sheet of sufficient size between the pallet and the bottom compact sheet as well as on top of the stack.

Compact should always be stored flat in order to avoid any bending or bowing of the sheet.

Never store boards with protective sheet for more than 6 months.



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The following tools can be used to machine the exterior grade compacts

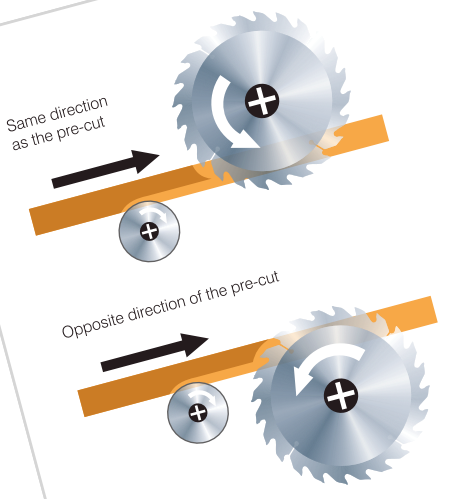
- Saw, router, spindle moulder
 - Drill
 - Digital control machine
- For the machining of exterior grade compacts carbide or diamond tipped tools are required. Depending on the tools that are used preliminary tests will be necessary in order to define the tools characteristics, feed rates, and rotation speeds to avoid any local heating and to overcome defective machining.
- It is recommended that protective film is not removed until after machining or until installed if possible.
- If it is necessary to remove the film during machining, then only do this along the edge of the board. PROTECTIVE FILM MUST BE REMOVED SIMULTANEOUSLY FROM BOTH SIDES OF THE BOARD. NEVER LEAVE PROTECTIVE FILM IN PLACE ONCE THE BOARDS ARE INSTALLED.

Cutting

The feed speed depends on the thickness of the compact sheets and the quality of the cutting work required. Slower fan speeds should be used with thinner laminates. Chipping from the decorative surface can be avoided by using the exit angle of the blade. By raising the blade the quality of the cut on the top side improves to the detriment of the bottom side and vice versa.

Best results are obtained by using machines with tracer saws or by placing a base board under the compact to be machined.

Use of well sharpened unbuckled carbid or diamond blade is recommended with the narrowest gap between saw teeth as possible. There must be atleast 80-120 saw teeth.



Drilling

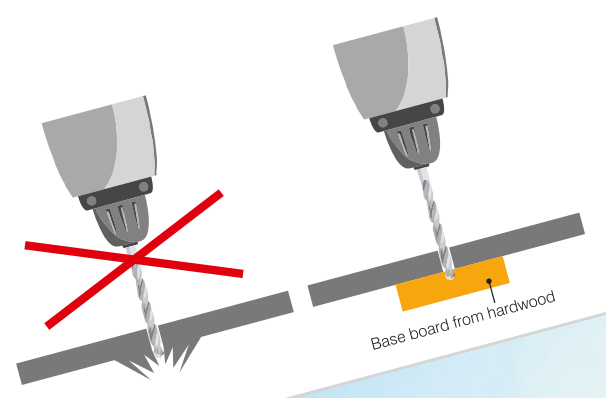
Use drills with a 60 to 80 degree point angle, not 120 degree

Drilling of higher diameters must be done with universal drilling machines and with drills without a centre point

In order to prevent the front face from flaking where it comes out of the machine:

The progression of the drill must be smooth.

It is recommended to work on a base board that can be drilled, such as MDF or plywood.



Edge Finishing

The edges will not require a special treatment but are machinable for particular finishes

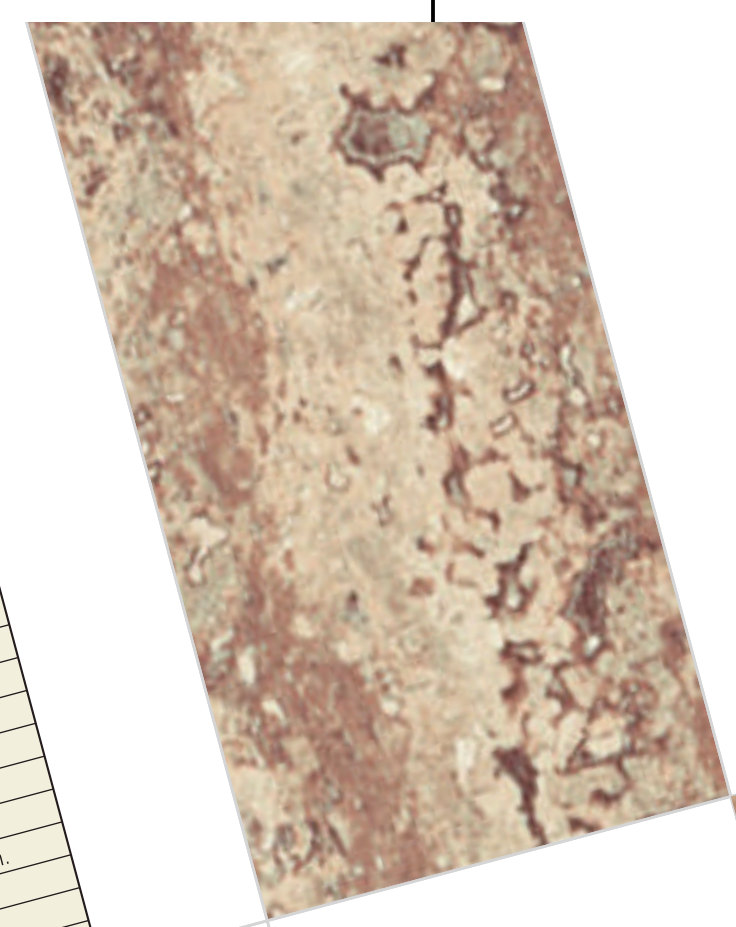
Machine the edge of the compact by square cutting, chamfering and bevelling. We advise you to sand and polish to avoid injury.

It is recommended to file down the sharp edges to prevent injuries.



Technical Specifications

EXTERIOR GRADE COMPACT LAMINATE SIZE : 2440 mm. X 1220 mm.		EDF Grade Specification As per EN 438-part 6	XCL Values
SI.No.	Properties		
1	Thickness (mm.) (max.) $5.00 \leq t < 8.00$ (mm.)	6.00 ± 0.40 mm.	6.15 mm.
2	Length (mm.)	$2440.00 + 10.00 / - 0.00$ mm.	2441.00 mm.
3	Width (mm.)	$1220.00 + 10.00 / - 0.00$ mm.	1221.00 mm.
4	Edge Straightness mm. (max.)	1.50 mm. / m.	0.90 mm. / m.
5	Edge Squareness mm. (max.)	1.50 mm. / m.	0.80 mm. / m.
6	Flatness (mm.) (max.) $2.00 \leq t < 6.00$ mm. $6.00 \leq t < 10.00$ mm. $t \geq 10.00$ mm.	8.00 mm. / m. 5.00 mm. / m. 3.00 mm. / m.	4.00 mm. / m. 2.50 mm. / m. 1.30 mm. / m.
7	Flexural Modulus (min.)	9000 Mpa.	13966 Mpa.
8	Flexural Strength (min.)	80 Mpa.	114 Mpa.
9	Flexural Strength (min.)	60 Mpa.	66 Mpa.
10	Density, gm. / cm ³ (min.)	1.35 gm. / cm ³	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) $t \geq 5.00$ mm. b) Indentation dia. mm. (max.)	1400.00 mm. 1800.00 mm. 10.00 mm.	1600.00 mm. 2000.00 mm. 6.00 mm.
12	Resistance to impact by large diameter ball. a) Drop height mm. (min.) $2.00 \leq t < 5.00$ mm. (t=nominal thickness) $t \geq 5.00$ mm. b) Indentation dia. mm. (max.)	10% 8% Rating 4	4% 3% Rating 5
13	Resistance to wet conditions a) Mass increase (%) max. $2.00 \leq t < 5.00$ mm. (t=nominal thickness) $t \geq 5.00$ mm. b) Appearance not worse than Dimensional stability at elevated temperature. $2.00 \leq t < 5.00$ mm. (t=nominal thickness)	0.40% 0.80% 0.30% 0.60%	0.25% 0.45% 0.20% 0.40%
14	Resistance to climatic shock a) Longitudinal, % max. b) Transverse, % max. $t \geq 5.00$ mm. a) Longitudinal, % max. b) Transverse, % max.	Rating 4 0.95 0.95	Rating 4 1.10 1.50
15	Resistance to artificial weathering (Including Light fastness) a) Appearance b) Flexural Strength index, min. c) Flexural modulus index, min.	After 650 MJ/m ² radiant Exposure (3000 hrs) Rating 3 Rating 4	3000 hrs passes Rating 4 Rating 4
16	Resistance to artificial weathering (Including Light fastness) a) Appearance b) Flexural Strength index, min. c) Flexural modulus index, min.	Ater 1500 hrs Exposure Rating 3 Rating 4 Class 1	1500 hrs passes Rating 4 Rating 4 Class 1
17	Resistance to artificial weathering (Including Light fastness) a) Gray scale rating (not worse than) b) Appearance (min.)		
17	Resistance to UV light a) Gray scale rating (not worse than) b) Appearance (min.)		
17	Spread of flame Remark: E (Exterior Grade), D (Severe use), F (Flame Retardant Grade)		



Cleaning / Maintenance

The perfectly smooth non-porous surface of the facades does not require any special maintenance since it is rinsed naturally by rain water.

Indepth Cleaning

For this type of cleaning, for example to remove leftover adhesive from the protective films a non abrasive cleaning agent can be used. Another option is to use high pressure washers set to a pressure of 50 to 100 bars and a temperature of 50 to 60 degrees.

Regular Maintenance

Exterior compact panels do not need any extra care. Cleaning is necessary under certain circumstances. For cleaning, use clean warm water, clean clothes or rags and soap. Never use solvent or cleaners containing solvent. Do not scrape with hard objects. Severe marks such as pencil traces can be dealt with quickly.

Never Use

Abrasive sponges or cloths
Solvents such as acetone, nail polish remover, or alcohol
Mechanical systems such as rotating brushes or sweepers



Environment Compatibility

Compact laminate panels do not have any polluting effect on the environment and are not hazardous for health. They are made up of 80% cellulose fibres obtained from paper and 20% thermosetting resins and do not contain any heavy metals or asbestos and hence do not emit any gases, fumes, solvents or liquids. The paper which is used for manufacturing high pressure compact sheets are made from raw material sourced from sustainable forests.


ROYALÉ TOUCHÉ
XCL Xterior
Compact
Laminate

Warranty

Royalé Touché XCL warrants the quality of all mentioned products within the scope of the values given in this delivery programme. However, Royalé Touché XCL is expressly not liable for defects in the working or processing of the substructure or installation as Royalé Touché XCL cannot control the execution of these. Local building regulations are to be observed. All information corresponds to the current state of the technology. Suitability for particular applications cannot be confirmed in general.

The printing process may lead to slight deviations from the original pattern. If needed, please request an original sample.

