ATTACHMENT 6



Thank you,

Pasquale Aiello

B. Arch. Sci., Lic. Tech. OAA, Int'l. Assoc. AIA



EXPONA COMMERCIAL

Expona Commercial is a collection of Luxury Vinyl Tiles, replicating the beauty of natural timber, slate and marble, with additional creative and innovative effects for use in heavy commercial areas.



Gauge	EN 428/EN ISO 24346	2.5mm		
Wear Layer	EN 429/EN ISO 24340	0.55mm		
Plank Size	EN 427/EN ISO 24342	$36 @ 101.6 x 914.4mm = 3.34m^2 24 @ 152.4 x 914.4mm = 3.34m^2 18 @ 152.4 x 1219.2mm = 3.34m^2 15 @ 184.2 x 1219.2mm = 3.37m^2 14 @ 203.2 x 1219.2mm = 3.46m^2 12 @ 184.2 x 1524mm = 3.37m^2 12 @ 76.2 x 914.4mm 12 @ 101.6 x 914.4mm 12 @ 152.4 x 914.4mm 32 @ 152.4 x 914.4mm$		
Tile Size	EN 427/EN ISO 24342	$12 @ 304.8 \times 914.4mm = 3.34m^{2}$ $11 @ 203.2 \times 1524mm = 3.41m^{2}$ $9 @ 609.6 \times 609.6mm = 3.34m^{2}$ $8 @ 457.2 \times 914.4mm = 3.34m^{2}$ $12 @ 152.4 \times 609.6mm$ $12 @ 304.8 \times 304.8mm$ $6 @ 304.8 \times 609.6mm$		
Total Weight	EN 430/EN ISO 23997	4290g/m ²		
General Performance	EN 649 EN ISO 10582	Conforms		
Use Area	EN 685/EN ISO 10874			
Reaction to Fire	EN 13501-1	Class Bfl-S1		
Abrasion Resistance	EN 660-2 EN ISO 10582	Group T Type I		
Slip Resistance	EN 13893 DIN 51130 AS/NZS 4586	Class DS (dry condition) R10 R10		
	For safety flooring with sustainable w	For safety flooring with sustainable wet slip resistance, refer to Expona Control or the Polysafe r		
Indentation Residual	EN 433/EN ISO 24343-1	≤0.05mm		
Dimensional Stability	EN 434/EN ISO 23999	≤0.1% max		
Thermal Conductivity	ISO 1264-2	Suitable for underfloor heating. Max 27°C.		
Light Fastness	ISO 105-B02	(Method 3) ≥6		
Castor Chair (continuous use)	EN 425/ISO 4918	yes, type W, EN 12 529		
Electrical Behaviour (body voltage)	EN 1815	≤2kV Classified as 'antistatic'		
VOC Emissions	Indoor Air Comfort GOLD AgBB VOC test FloorScore	Eurofins certified product Very low emissions Certified product		
Responsible Sourcing	BES 6001 SA 8000	Very Good Approved factory		

PUR - Expona Commercial PUR features a high quality, cross-linked polyurethane reinforcement, UV cured to provide a low cost, polish-free maintenance regime for the lifetime of the flooring.

For information regarding handling and installation, adhesives, maintenance, applications, chemical resistance and product warranty, consult Polyflor Customer Technical Services on +44 (0)161 767 1912, or email tech@polyflor.com. The data presented is correct at the time of printing. For latest information, please visit our website polyflor.com.

Decoration and shade may vary slightly from the samples shown.





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FLOORING

James Halitead"

EXPONA commercial

Expona Commercial is a collection of Luxury Vinyl Tiles, replicating the beauty of natural timber, slate and marble, with additional creative and innovative effects for use in heavy commercial areas.



PRODUCT SPECIFICATION

	 The flooring shall be flexible PVC tile and plank flooring in 2.5mm thickness.
	• It shall have the following laminated construction: circa 0.55mm clear PVC wear layer, circa 0.07mm print film layer and circa 1.88mm backing ply.
	 The flooring shall feature a high quality, cross-linked polyurethane reinforcement to provide superior cleaning benefits, life cycle maintenance savings and optimum appearance retention.
	 In accordance with EN ISO 10582, the in-use classification must be at least 23/33/42, as defined in EN ISO 10874: i.e. domestic areas with heavy use; commercial areas with heavy use.
)	 In respect of flamespread, the flooring shall have been fully tested to EN 13501-1 and certified as having Class B -S1, achieving the criteria EN ISO 9239- 28kw/m² and the mandatory requirement of EN ISO 11925-2 pass. The flooring shall have been fully tested to ASTM E648 by an independent test house and classified as Class 1 rating, making it suitable for use in institutional, commercial and public buildings.
	• With regard to EN 13893 for slip resistance, the flooring shall be classified DS, making it suitable for use in areas which are predominantly dry.
	 When tested to DIN 51130, the flooring achieves an R10 slip rating, for flooring with sustainable wet slip resistance, refer to Expona Control PUR or the Polysafe ranges.
	The product's weight should not be more than 4,290g/m ² .
_	 In respect of light fastness, the flooring shall have been fully tested to ISO 105-B02 Method 3 as having a pass to ≥6
	The flooring will achieve a BRE Global Environmental A+ rating ENP 429 in the Green Guide to Specification.
	 The manufacturer should provide a facility to take back and recycle waste vinyl flooring material through the Recofloor scheme.
	Specific EN 15804 Environmental Product Declaration (EPD) available on request.
	 Polyflor Expona Commercial PUR achieves a very low VOC emissions result when tested to AgBB standards, is certified by Eurofins as achieving Indoo Air Comfort Gold and is also a FloorScore certified product.
	Polyflor Expona Commercial PUR is certified to BES 6001 for responsible sourcing as very good, and is manufactured at an approved SA 8000 factory
	• The manufacturer of the floorcovering must be in possession of a valid quality systems certificate, showing compliance with BS EN ISO 9001.
_	• The manufacturer of the floorcovering must be in possession of a valid environmental certificate, showing compliance with ISO 14001.
	 A moisture test must be carried out, to ensure that the subfloor has dried out to a level consistent with the application of vinyl flooring. The test should be carried out using a hygrometer, in accordance with the instructions in BS 8203. The result should not exceed 75%RH, once equilibrium has been achieved.
	The adhesive used must be approved by Polyflor, to ensure full product compatibility.
	• Products must be fully conditioned to the environment in which they are to be installed. See Polyflor installation instructions for details.
	Installation must be carried out in accordance with BS 8203, BS 8204 and the instructions of Polyflor.
	Suitable for use with underfloor heating up to 27°C. See Polyflor installation instructions for details.
	NOTE: The subtle blending of shades and graining variation can best be obtained by the random shuffling of 3-4 packs of tiles.
	• We recommend that adequate UV protection be taken against products being installed in direct sunlight as fading may occur.
	 Polyflor Expona Commercial PUR is suitable for heavy commercial use, and also for use in the home. On-floor temperatures in conservatories can become quite high, so it is strongly advised that in such situations a Polyflor recommended high temperature adhesive is used.
	 For further information and advice on specific applications, consult Polyflor Customer Technical Services on +44 (0)161 767 1912, or email tech@polyflor.com.
	 At the date of issue the data presented is correct. However, Polyflor Ltd. reserve the right to make changes which do not adversely affect performance or quality.



James Halstead™ FLOORING

Five Knuckle Standard Weight Swing Clear Series (Reversible)

Swing Clear Hinges create barrier free openings by moving the hinge barrel and door edge out of the way.

- Recommended for use on standard weight, medium frequency doors in schools, hospitals or other public buildings
- Hinge allows for maximum clearance for passage of beds, tables or other equipment through the doorway
- Meets ADA Requirements and ANSI A117.1-1986
- Pressed steel jambs require no special reinforcing
- Pin is held in place by an NRP set screw, which allows the hinge to be reversible
- For Beveled Edge, where doors are beveled on hinge side, specify TA4895 or TA4395
- For available finishes see page 29

No.	ANSI Cross Reference	Base Material	Weight
TA2395	N/A	Stainless	STD
TA2895	A8122	Steel	STD

Specifications

			No. of	Fasteners	
Inches	mm	Gauge	Holes	Machine	Wood
4 ¹ / ₂ "	114.3	.134	8	¹ / ₂ x 12-24	1 ¹ / ₄ x 12
5"*	127	.146	8	¹ / ₂ x 12-24	11/2 x 12

*Not Available with electric options







Options:

Code	Description
ТВ	Ball Bearing
HT	Hospital Tip
SSF	Safety Stud Feature
QC	ElectroLynx® Hinge – 2,4,6,8,10 or 12 wire available in 4-1/2" US26D and US32D only
cc	Concealed Circuit – 2,4,6,8,10 or 12 wire available in 4-1/2" US26D and US32D only
ММ	Magnetic Monitoring



The global leader in FM-14 door opening solutions 800-346-7707 | www.mckinneyhinge.com Check the web site for the up-to-date catalog

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Pinnacle Series CLAD DOUBLE HUNG

SPECIFICATIONS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Factory assembled aluminum clad wood double hung windows [including fixed units], glass and glazing, operable hardware, weatherstripping, insect screen, and [grilles].
- B. Anchorages, attachments, and accessories.

1.02 RELATED SECTIONS

- A. Section 01340 Shop Drawings, Product Data, and Samples.
- B. Section 01610 Delivery, Storage, and Handling.
- C. Section 01710 Final Cleaning.
- D. Section 07200 Batt and Blanket Insulation.
- E. Section 07920 Sealants and Caulking.
- F. Section 08800 Glass and Glazing.

1.03 REFERENCES

- A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM):
 - 1. ASTM E-283 Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
 - 2. ASTM E-547 Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Difference.
 - 3. ASTM E-330 Structural Performance of Exterior Windows, Curtain Walls, and Doors under Uniform Static Air Pressure Difference.
- B. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA):
 - 1. AAMA/WDMA/CSA 101/I.S.2/A440-11 North American Fenestration Standard/Specification for Windows, Doors and Skylights.
- C. WINDOW & DOOR MANUFACTURERS ASSOCIATION (WDMA):
 1. WDMA I.S-4 07 Industry Standard for Water-Repellent Preservative Treatment for Millwork
- D. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- E. NATIONAL FENESTRATION RATING COUNCIL (NFRC)

1.04 PERFORMANCE CRITERIA

- A. Patio Door units shall meet requirements in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11.
- B. Air leakage shall not exceed 0.30 cfm per sq.ft. of sash when tested in accordance with ASTM E-283 at 1.57 psf.
- C. No water penetration shall be allowed when tested in accordance with ASTM E-547.
- D. Window units shall withstand positive and negative wind loads without damage. The units shall be tested in accordance with ASTM E-330.

1.04 PERFORMANCE CRITERIA

- A. Double Hung units shall meet requirements in accordance with AAMA/WDMA/CSA 101/I.S.-2/A440-11.
- B. Air leakage shall not exceed 0.30 cfm per sq.ft. of sash when tested in accordance with ASTM E-283 at 1.57 psf.
- C. No water penetration shall be allowed when tested in accordance with ASTM E-547.
- D. Window units shall withstand positive and negative wind loads without damage. The units shall be tested in accordance with ASTM E-330.

1.05 SUBMITTALS

- A. Shop drawings shall be submitted in accordance with Section 01340.
- B. Product data in the form of general catalogs, test lab reports, product performance, and warranty information shall be submitted in accordance with Section 01340.
- C. Samples showing glazing, quality of construction, and finish shall be submitted in accordance with Section 01340.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. In compliance with Section 01610, window units shall be delivered undamaged, with protective packaging and fitted with sash shipping blocks. Complete installation and finishing instructions shall be included.
- B. Store units in a clean, dry place off the ground in an upright position.

Pinnacle Series CLAD DOUBLE HUNG

SPECIFICATIONS

PART 2 – PRODUCTS

2.01 MANUFACTURER

A. Pinnacle Series Aluminum Clad Wood double hung window units [including fixed units] as manufactured by Windsor Windows & Doors.

2.02 MATERIALS

A. Frame: Shall be select softwoods treated with water repellent preservative in accordance with NWWDA I.S.-4-81, assembled with hardware installed. Exposed exterior portion shall be extruded aluminum cladding. Frame cladding sealed at corners with injected silicone and aluminum corner keys. Jamb thickness shall be 11/16". Jamb width shall be 4-9/16". Jamb extenders are available to match other finished wall thicknesses. Aluminum sill is thermally broken and end sealed. Vinyl hinged nailing fin and drip cap are utilized for installation. Rigid aluminum nail fin and color matched drip cap option is available. Natural Alder and Fir interior options are available. DP Upgrade units receive a ½" taller inside sill stop.

<u>Concealed Jambliner Option</u>: Exterior exposure shall have finished matched clad covers. Interior exposure shall have wood covers species matched to the sash/frame. The balance system shall be a block and tackle inverted balance mounted to the side jamb. A jamb jack will be standard, concealed with a removable transition dust pad. A kerf mount weatherstrip is applied to each side jamb, the entire length, providing a seal between the sash and both side jambs. <u>Standard Jambliner Option</u>: A flexible hinge jambliner, available in white and beige. The balance system shall be a block and tackle balance mounted to the jambliner shell. The jambliner provides a tight seal to the sash. A dust pad is applied to the jambliner shell, providing a seal at the check rail assembly.

- B. Sash: Wood interior shall be select pine treated with water repellent preservative. Corners shall be coped and stapled. Exterior surfaces shall consist of aluminum extrusion with lapped corners held together by color-matched injected-molded corner keys. Foam tape is applied to the back side of glass stop. Natural Alder and Fir interior option is available. DP upgrade units shall have no finger pulls. No finger pull option is available for standard units.
- C. Finish: All aluminum exterior surfaces shall be covered with a factory applied, polyester powder-coat paint in 22 standard and 20 feature colors. Anodized colors are also available.
- D. Glazing: Shall be 3/4" double pane LoE 366 insulating glass as standard, glazed with double-faced tape plus a full perimeter bead of silicone, and interior wood stops. A wide array of other glass options is offered including clear, tinted, tempered, and obscure. Cardinal's PreserveTM option is available on all LoE 366, glass. It is a removable, factory-applied protective film adhered to both interior and exterior surfaces of the glass.
- E. Weatherstripping: Shall be closed-cell foam encased in TPE skin installed at the head and sill. A PVC-Alcryn hollow bulb applied to the inside check rail. Concealed jambliner shall have a wood parting stop with a kerf mount bulb providing a seal to the top rail. Flex back jambliner shall have a vinyl kerf mount parting stop with a hollow bulb providing a seal to the top rail.
- F. Hardware: Spring-loaded die-cast tilt latches allow both sash to be tilted in with ease. Balance system consists of a block and tackle with a locking shoe that allows for easy cleaning or removal. Flange mounted cam action locks have contemporary curved handle and concealed fasteners. One lock is used on glass widths 26" and below. Two locks are used on glass widths of 28" on up. Locks, keepers, and tilt latches all have a baked on champagne enamel finish. White, black, bronze, brass, oil-rubbed bronze, and satin nickel hardware options available.
 G. Screens: Shall be a fiberglass BetterVue[™] screen set in painted aluminum frame. UltraVue[™] Screen
- G. Screens: Shall be a fiberglass BetterVue[™] screen set in painted aluminum frame. UltraVue[™] Screen option is available. Screens are full height of opening. Screens available in 22 standard and 20 feature colors. The screen is intended to allow air and light in and keep insects out. The screen is not intended to stop children, adults or animals from falling out an open window.

Pinnacle Series CLAD DOUBLE HUNG

SPECIFICATIONS

H. Grilles: (Extra when specified) Colonial grilles shall be select pine with moulded edges. Stick grilles are fastened to sash with press pins, while perimeter grilles use a hidden clip system. Stick grilles and perimeter grilles are available in 7/8" or 1-1/4" widths. White, cinnamon, bronze, tan, ivory, hunter green, or black; aluminum inner grilles (in air space) are also available in 13/16" flat, 3/4" profiled, or 1" profiled. Two-toned inner grilles (3/4" profiled only) are available with a white interior, and a bronze, green, tan, ivory, or black exterior. Windsorlite (WDL) simulates true divided lite, but is created by adhesively fixing the wood interior and aluminum exterior to the surfaces of the insulated glass. WDL is available in 7/8" and 1-1/4" standard, 5/8" putty, and 7/8" putty with standard interior. All are available with or without inner bar between the glass. Exterior bars are available in 22 standard and 20 feature colors.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that there is no visible damage to the unit before installation.

3.02 INSTALLATION

- A. Verify the rough opening is of the recommended size and that it is plumb, level, and square.
- B. Install the window unit in accordance with the manufacturer's recommendations. On operating units, remove shipping blocks after unit is fully installed.
- C. Install sealant, backing material, and insulation around opening perimeter in accordance with Section 07900 and Section 07920.

3.03 ADJUSTMENT AND CLEANING

- A. Operate unit and verify that all hardware operates freely. Make any adjustments necessary.
- B. Cover the window unit to avoid damage due to spray paint, plaster, and other construction operations.
- C. Remove all visible labels and instructions.
- D. Final cleaning of glass in accordance of Section 01710.