GUIDANCE FOR
CONSULTANTS/ARCHITECTS

FACADE WEATHERPROOFING - FIRE

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AVCL (AIRTIGHT VAPOUR CONTROL LAYER) **SYSTEM**

System Function

Airtight vapour barrier membrane.

System Location

AVCL should be located on the warm side of the facade composition and on the top of the substrate (mineral wool insulation, concrete, masonry, aluminium, etc.) in order to provide a barrier to water, air and vapour.
The weatherproofing design of the AVCL membrane systems should be done in detail and project by project basis.

System Method of Installation

Fixing

Depending on substrate characteristics could be used double-sided adhesive tape or past adhesive cartridge.
If AVCL membrane is applied as a facade liner (opaque areas) is recomendable to apply the adhesive tape or past adhesive vertically (or horizontallly) spaced with minimum @500mm.
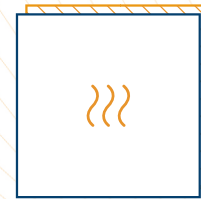If AVCL membrane is applied on interface/joint it is recomendable to apply the adhesive tape or past adhesive continuosly and parallel to the joint.
Membrane mechanical fix not required.

Vertical Overlap 150mm

Horizontal Overlap 100mm

Perimeter sealing

Double side adhesive/sealant tape (thickness > 1,50mm) or past adhesive 1 bead with 8mm dia. applied continuosly on the AVCL end laps and to the substrate.
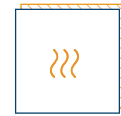
Details

All the nails/screw perforations < 25mm dia. should be sealed with a patch 50x50mm of double-sided adhesive tape. The facade perforations with irregular shape and above 25mm should be studied in detail case by case. All tapes, adhesives and sealants should be applied when it is not raining and the temperature is above 5º. Primer is required for temperatures below < 5º; Care should be taken on porous surfaces such as concrete.

UAE REGULATION - AVCL SYSTEM – FIRE PERMANCE

AVCL membrane system has a severe impact on facade fire propagation. It should be specified non-combustibility or limited combustibility with minimum Class A2-s1, d0 on EN13501-1, fulfilling all the requirements of the UAE Fire and Life Safety Code of Practice (latest version). Tapes, adhesives and sealants should be tested and certified as part of the membrane system always replicating the end-use.

AVCL SYSTEMS COMMON FAULTS

· Membrane perforations not sealed;
· Lack of compatibility tests;
· Tapes, adhesives and sealants not allowing differential movements;
· Tapes, adhesives and sealant are not tested as a complete system;
· Lack of detailing;

AVCL SYSTEM ACCESSORIES DESIGN

	Application		AVCL MEMBRANE SYSTEM
	Overlaps		●
	Fixing	Gypsum Sheathing Board, Calcium Silicate Boards, Cement Basis or similar Aluminium Frame Mineral Wool	●
		Masonry, Concrete or similar porous surfaces	●
		Galvanized Studs or similar metallic smooth surface	●
		Aluminium Foil (insulation)	●
	Perimeter Sealing	Concrete, Masonry or similar porous surfaces	●
		Aluminium	●
		EPDM	●
	Nail/Screw Perforations Sealing		●
	EPDM Membrane System		●

✓ **Fully Envelope System Tested & All Compatibilities Checked**

● It is necessary an accessory tested and developed for that application.

● It is necessary an accessory with elongation and with thickness above 1.0 mm.

PRODUCT AVAILABILITY

EFFISUS
Excellence in Weatherproofing

EFFISUS

Excellence in Weatherproofing

PRODUCT AVAILABILITY
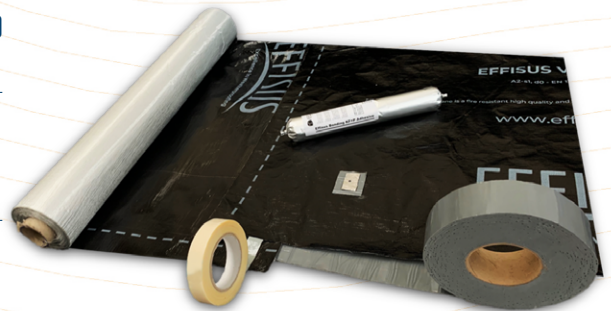
AVCL SYSTEMS (FIRE & WEATHERPROOFING DESIGN)

👁 View on the website

EFFISUS VAPOUR FR SYSTEM

Effisus Vapour FR system has approved by Dubai Civil Defense, fulfilling all the requirements of the UAE Fire and Life Safety Code of Practice latest version.

🔥	Reaction to fire [a]	System	Class A2-s1,d0 (EN 13501-1)
		Membrane	Class A1 (EN 13501-1)
�	Vapour Resistance Sd (m)		> 7500 (EN 1931)
〰	Resistance to air penetration (m3/(h x m2 x 50 Pa)		0,002 (EN 12114)
💧	Water penetration		W1, passed (EN 1928)
⬌	Tensile Strength MD/CD (N/50mm)		max: 890; max: 861 (EN 12311-1)

[a] The fire classification was obtained with Effisus accessories (double-sided adhesive tapes and paste adhesive) tested as a system.

PRODUCT AVAILABILITY

AVCL SYSTEMS (FIRE & WEATHERPROOFING DESIGN)

EFFISUS ACCESSORIES SYSTEM

X3 SYSTEM POSSIBILITIES

Effisus 2Bond DS Tape

Function
Perimeter sealing;
Sealing nail/screw perforations

Substrates compatibility
Concrete or similar porous surfaces; Aluminum;
aluminium foil

Special notes
Accessory with elongation and movements

Effisus Bonding KF+P paste adhesive

Function
Perimeter sealing; Fixing and sealing nail/
screw perforations

Substrates compatibility
Concrete or similar porous surfaces;
Aluminum

TECHNICAL SUPPORT

· Project by project approach
· Product specifications

· Weatherproofing design
· Technical Submission

· Dedicated CPD's
· Compatibility assessment

· Site support
· Project method statement