# **Product Technical Statement**

#### Product

FAVEMANC® ventilated façade systems – XB PRO17 and XD22

#### **Purpose**

NZC Tileworks Ltd are the New Zealand distributor of FAVEMANC® ventilated façade systems comprising Natural Clay Terracotta tiles and Aluminium Sub-frame.

This document serves as an executive summary of the information necessary when specifying, consenting and using FAVEMANC® ventilated façade systems.

Documentation referred to in this summary is available on request, contact NZC Tileworks 0800 688 788 or enquiries@tileworks.co.nz

#### Description

The FAVEMANC® ventilated façade systems is a ventilated façade system, consisting of extruded ceramic panels fixed by one of two specified stainless steel (or carbon steel) clip systems to aluminium subframes attached to the supporting structure.

The specified clip systems are:

- XB PRO17 the perfect balance between covering and metal structure with high mechanical performance despite its light weight. The reduction of metal elements results on savings and improves the performance.
- XD22 the heaviest system and allows us to reach large formats with the highest mechanical performance. It can also be used with most of our special pieces.

FAVEMANC is a ventilated façade system whose exposed components are made exclusively from extruded clinker clays. The range offers 50 different colour variations across natural and glazed, with unlimited possibilities to almost any RAL colour specification.

The FAVEMANC ventilated façade system has a support structure which comprises of individual components using 6063-T5 alloy. Qualified FAVEMANC and TILEWORKS teams design the Support System on a project-by-project basis to accommodate site specific Design, Seismic and Wind-load requirements.

Active Plus is a photocatalytic product that acts as an active ingredient in our products with antibacterial, self-cleaning and decontaminating benefits. Favemanc pieces in which Active Plus is applied are capable, in the presence of UV-A light, of initiating a nanoscale photocatalytic reaction resulting in three basic benefits of antibacterial, self-cleaning and decontaminating.

#### Scope of Use

This PTS covers the use of the FAVEMANC® ventilated façade systems on new or existing buildings:

- located in any wind zone up to and including Extra High (as classified in NZS3604) or where
  the building is specifically designed to AS/NZS1170 "Structural Design Actions" up to a
  maximum design wind pressure differential of 2.5kPa (ULS).
- for exposure zones B, C, and D as described in NZS3604
- for all seismic zones

## **Conditions**

The FAVEMANC® ventilated façade systems must be designed and installed in accordance with the details in the AVEMANC product guide. The suitability of the stainless steel (or carbon steel) clips and aluminium subframes must be verified before use in industrial or geothermal microclimates, or exposure zone E (as classified in NZS3604)

#### Limitations

The attachment of the aluminium subframes to the supporting structure is outside the scope of this certificate, and is subject to specific design

### **Technical Literature:**

- FAVEMANC catalogue with Technical Specifications.
- XB PRO17 DIT #507
- XBPRO17-TECHNICAL-DATA
- XD 22 DIT #585/12
- XD 22-TECHNICAL-DATA

#### Quality

FAVEMANC® Terracotta products supplied to NZC Tileworks Ltd are manufactured in Spain at Gresmanc Internacional SL. This site is certified ISO 9001:2000 & ISO 14001:2004.

Tileworks would work with the specifier from concept/design stages through to supply and installation providing technical input and managing the installation, ensuring quality and compliance.

#### **Standard Tile Dimensions**

XB and XD ranges

Туре	Height	Length	Thickness	Weight
	(mm)	(mm)	(mm)	kg/m²
XB PRO 17	300 – 400	600 – 1,200	17	25.5
XD 22	200 – 500	600 – 1,500	22	33.0

A variety of sun screens, louvers and other special profiles are also available for a wide range of applications.

# **Installation Requirements**

FAVEMANC ventilated facades must be installed by experienced façade installers and to the specifications outlined in the Manufacturers Specifications, Producer Statement and Shop Drawings (Shop Drawings provided by FAVEMANC post order confirmation).

Tileworks will work with NZ based façade engineers to obtain/provide PS1 and PS4 documents, ensuring compliance with the NZBC.

# NZ Building Code Clauses relevant to FAVEMANC® ventilated façade systems and supporting documentation.

Code	Basis of Compliance:	Related	Comments:
Clause:		documents:	
Structure B1.3.1	Building code performance based on calculations, tests, simulations, etc not contained in Verification Methods	DIT TA#507, DIT TA#585/12	FAVEMANC ventilated façade systems meet the ETAG (European Organisation for Technical Approvals) specifications for ventilated wall claddings.  These requirements also satisfy the NZ Building Code for structural performance.
Structure B1.3.2	Building code performance based on calculations, tests, simulations, etc not contained in Verification Methods	DIT TA#507, DIT TA#585/12	FAVEMANC ventilated façade systems meet the ETAG (European Organisation for Technical Approvals) specifications for ventilated wall claddings.  These requirements also satisfy the NZ Building Code for structural performance.
Structure B1.3.3 a, f, h	Building code performance based on calculations, tests, simulations, etc not contained in Verification Methods	DIT TA#507, DIT TA#585/12	Performance under seismic loads has been <i>inferred</i> from the results of DIT tests on the tiles and fixing details, and on assemblies subjected to face loads simulating wind pressures.
Structure B1.3.4		B1/VM1	The installation of FAVEMANC ventilated façade systems are tolerant of variability of the supporting structure and is resilient to the failure of any particular component.
Durability B2.3.1b	Verification method	B2/VM1; DIT TA#507, DIT TA#585/12	FAVEMANC façade tiles are ceramic with low water absorption and are not affected by freezethaw.  The stainless-steel fixing clips and screws, and aluminium fixing rails, are suitable for use in corrosive marine environments.
<b>Durability</b> B2.3.2b		DIT TA#507, DIT TA#585/12	All components exceed the required durability of 15 years and are likely to have service life in excess of 50 years.  Tiles are easily removed and replaced if access is required to replace fixings.
Fire Safety: C3.5 & C3.7	Non-combustible Materials – does not require testing	C/VM2; DIT TA#507, DIT TA#585/12	The components of the FAVEMANC ventilated façade systems are non-combustible.
External moisture E2.3.2			The FAVEMANC ventilated façade system is a ventilated façade that contributes to the management of external moisture.  Weathertightness and airtightness is determined by specific construction details of the supporting structure.
Hazardous building materials F2.3.1			None of the components of the FAVEMANC ventilated façade system contain or emit harmful materials.
Energy efficiency H1.3.1			The FAVEMANC ventilated façade system optimizes and reduces energy consumption by eliminating most thermal bridges, reaching, in

	specific situations, energy savings over 30%.

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