

Product Technical Statement



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Product: Koramic Facatile

Description: Koramic Facatile tiles are an extruded clay tile with a continuous nib for flat vertical cladding. The tiles have an effective length of 160/161mm, and an effective width of 252/255mm depending on colour. They are intended to be installed to horizontal battens structurally fixed to vertical counterbattens over a wall underlay, forming a drained and ventilated cavity in the style described in E2/AS1. They are available in a range of colours. Half of the tiles are permanently marked with the word FACATILE pressed into the tile before firing. Facatile tiles are fixed to horizontal timber battens using a proprietary Facaclick and screw.

Scope of Use: This Product Technical Statement covers the use of Koramic Facatile tiles as a wall cladding for non-specifically designed timber framed buildings designed and constructed in accordance with B1/AS1, NZS3604 and E2/AS1, non-specifically designed steel framed buildings to NASH3405, and specifically designed buildings in accordance with B1/VM1 and AS/NZS1170. This Product Technical Statement covers the use of Koramic Facatile tiles on buildings within the Scope of E2/AS1 para 1.1 with respect to height and plan area, in all wind zones up to and including extra high, all seismic zones, and all exposure zones (except for microclimates) as defined in NZS3604.

Conditions: Koramic Facatile tiles must be installed in accordance with the Koramic Roof Solutions - Facatile literature, with adaptation for New Zealand using a "conventional" E2/AS1 type ventilated and drained cavity with wall underlay. Tiles must be laid on a double structure of H3.2 treated battens and counter-battens, with a wall underlay in accordance with E2/AS1 Table 23. Battens to provide for air circulation must have a minimum thickness of 18mm as in E2/AS1. Adequate air intake must be provided either through a 15mm-wide continuous opening or by using a ventilating batten at the base of the Facatile cladding. Ventilation must be sufficiently provided at the top of the Facatile cladding through a 15mm-wide continuous air exhaust opening. For the purpose of non-specific design using NZS3604 the tile cladding shall be taken as being "medium weight".

Technical Literature: Koramic Roof Solutions - Facatile
FOS test report -Nr: 2369a: Test to DIN EN 14437 to determine the uplift resistance of installed clay tiles

When used as described above, Koramic Facatile meets the following relevant performance requirements of the New Zealand Building Code

See over for Building Code Clauses

Relevant Code Clause:	Basis of Compliance:	Related documents:	Comments:
Structure B1.3.1	Alternative solution compared with acceptable solution	B1/AS1; NZS3604; E2/AS1; FOS test report -Nr: 2369a	Koramic Facatile tiles are manufactured and certified to European standard EN1304, which covers roof and wall tiles. The requirements of EN1304 for mechanical strength exceed the strength requirement of AS2049 which is the referenced standard in E2/AS1 for roof tiles. Wall tiles are not within the scope of E2/AS1, but the manufacturing standards for roof tiles, referenced in E2/AS1 for roofing, are also applicable to wall tiles. The capacity of the Facaclip fixing exceeds the loads required to resist wind loads and seismic loads normal to the plane of the wall.
Structure B1.3.2	Alternative solution compared with acceptable solution	B1/AS1; NZS3604; E2/AS1; FOS test report -Nr: 2369a	As above
Structure B1.3.3a, c, e, h, j, m, q	Alternative solution compared with acceptable solution	E2/AS1; FOS test report -Nr: 2369a	As above
Structure B1.3.4a, b, d	Alternative solution compared with acceptable solution	E2/AS1; FOS test report -Nr: 2369a	As above
Durability B2.3.1b	Verification method	B2/VM1; EN1304	Koramic Facatile tiles are a fired ceramic and can be expected to have a durability well in excess of 15 years. Fired clay products are not affected by UV light. The most severe category for frost resistance in EN1304 is 150 cycles, which Koramic Facatile roof tiles meet. This compares with only five freeze/thaw cycles specified in AS2049. Koramic Facatile tiles also meet the highest category EN 1304 requirement for water permeability of not more than 0.3 cm ³ per day. Clay tiles have an extensive history of traditional use for roofing in New Zealand and in Europe. This successful history can be drawn upon to provide confidence in the durability when used as a wall tile. Wienerberger is the largest producer of clay roof and wall tiles in Europe. Proprietary stainless steel Facaclips are used to fix Facatiles to horizontal H3.1 treated timber battens.
Durability B2.3.2a	Verification method	B2/VM1; EN1304	All components in the Koramic Facatile wall cladding systems meet a 50 year durability.
External moisture E2.3.2	Alternative solution compared with acceptable solution	E2/AS1	Koramic Facatile tiles are used as a wall cladding with a drained and ventilated cavity as described in E2/AS1. The Koramic Facatile tiles have properties equivalent to or exceeding those required by AS2049 for roof tiles which is referenced in the acceptable solution E2/AS1. The Facatile profile conforms to Type III tile profile in E2/AS1, and may be used with underlay for pitches greater than 25 degrees. Facatile tiles have been tested for use as roof tiles, and found to be watertight up to at least 60 degree roof slope. Use as a wall tile is less demanding than this, and satisfactory performance when used in a vertical plane can be inferred. The installation details for Koramic Facatile wall tiles mirror or exceed the E2/AS1 requirements for roof tiles. Koramic Facatile tiles meet the highest category EN 1304 requirement for water permeability of no more than 0.3 cm ³ per day.
External moisture E2.3.5	Alternative solution compared with acceptable solution	E2/AS1	The construction details for the ventilated and drained cavity which is an integral part of the Koramic Facatile cladding system are identical to the requirements for cavity construction in E2/AS1.

External moisture	E2.3.6	Alternative solution compared with acceptable solution	E2/AS1	Koramic Facatile tiles do not contribute any construction moisture, and the construction details specified mirror the details in E2/AS1.
External moisture	E2.3.7	Alternative solution compared with acceptable solution	E2/AS1	The cladding construction details of E2/AS1 using Koramic Facatile tiles over a drained and ventilated cavity with underlay makes due allowance for failure of the tiles and is tolerant of normal construction variabilities and tolerances.
Hazardous building materials	F2.3.1	Alternative solution		Koramic Facatile tiles do not contain any harmful products.
