

frontek

FRONTEK® CERAMIC TILES EXPLAINED

Frontek® Ceramic Tiles (Frontek®) are extruded, hollow, vitrified porcelain tiles supplied in different sizes and textures.

PURPOSE

SPS Building Ltd supplies Frontek® for use as part of an external wall cladding system.

SPS Building Ltd intends the specification and installation of Frontek® be carried out by suitably competent practitioners.

SCOPE OF USE

Frontek® may be used on:

- › New & existing buildings.
- › Buildings
 - › of any building height
 - › of any importance level
 - › in any corrosion zone, as defined in NZS 3604:2011
 - › located any proximity to a relevant boundary.

LIMITATIONS OF USE

- › Frontek® may only be installed on a metal substructure or using metal anchors.
- › Where fire resistance rating (FRR) is required this is subject to specific fire design.

USEFUL INFORMATION

For information on the design, specification and maintenance of Frontek®, refer to:

- › Frontek® cerámica tecnológica en fachadas 04/2016
- › Frontek® technical 01/2019
- › www.frontek.co.nz for configurations and details

CERTIFICATIONS

Greco Gres Internacional, manufacturer of Frontek holds the following certification and memberships:

- › ISO 9001 Quality Management certified by Bureau Veritas Certification.
- › Member of Spanish Green Building Council.



VERSION:

NOTE: Uncontrolled in printed format.

DATE:

Name:

Position:

Signed on behalf of: SPS Building Ltd.

By signing this pass™, the signatory confirms that the product described by this pass™ complies with s14G, Building Act 2004.

FURTHER INFORMATION

For further product assistance please contact:
Phone: 09 415 2669

www.spsbuilding.co.nz

PERFORMANCE CLAIMS

If designed, installed and maintained in accordance with the all SPS Building Ltd requirements, Frontek® will meet the following performance claims:

Basis of compliance		
NZBC Clause	Means of compliance	Relevance
B1 Structure B1.3.1, B1.3.2, B1.3.3 (a, f, h, j, q)	ALTERNATIVE SOLUTION Frontek® tested to: <ul style="list-style-type: none"> ISO 10545 Part 4 Determination of Modulus of rupture and breaking strength <ul style="list-style-type: none"> Flexion resistance Breaking strength ISO 10545 Part 5 Determination of Impact resistance by measurement of co-efficient of restitution <ul style="list-style-type: none"> Impact resistance EN 14411 <ul style="list-style-type: none"> Tensile strength Flexural strength 	Compliance with the clause is established based on the following test results: <ul style="list-style-type: none"> Flexion resistance = 30-55 N/mm² Breaking strength = 2000 N Impact resistance = 0.80 Tensile strength = 6000N Flexural strength = 28N/mm²
B2 Durability B2.3.1 (b)	VERIFICATION METHOD B2/VM1 Frontek® tested to: <ul style="list-style-type: none"> ISO 10545 Part 6 Determination of Resistance to deep abrasion for unglazed tiles ISO 10545 Part 8 Determination of Linear thermal expansion ISO 10545 Part 9 Determination of Resistance to thermal shock ISO 10545 Part 12 Determination of Frost resistance UNE 67-101-92 Determination of MOHS hardness ISO 10545 Part 14 Determination of Stain resistance ISO 10545 Part 13 Determination of Chemical resistance ISO 10545 Part 10 Determination of Moisture expansion EN 722-13 Methods for tests of masonry units 	Compliance with the clause is established based on the following test results: <ul style="list-style-type: none"> Deep abrasion resistance = 155mm³ Lineal thermic dilatation = 5x10⁻⁶/°C Satisfactory thermal shock resistance Satisfactory frost resistance Hardness (MOHS scale) 5-7 Stain resistance = Class 3-5 Chemical resistance = UA/ULA/UHA Less than 0.1mm/m moisture expansion Apparent density = 1589, dry density = 2335
C3 Fire affecting areas beyond the source C3.5, C3.7 (a)	ACCEPTABLE SOLUTION C/AS2-C/AS7 <ul style="list-style-type: none"> AS1530.1:1994 ISO5660.1.2015 	Applus Laboratories <ul style="list-style-type: none"> File no 17/15740-2362 Date: 19 January 2018 Non combustible AWTA Product Testing <ul style="list-style-type: none"> Test number: 17-005919 Date 15/11/2017
E2 External Moisture Contributes to E2.3.2	ALTERNATIVE SOLUTION Frontek® tested to: <ul style="list-style-type: none"> ISO 10545 Part 3 Determination of Water absorption, apparent porosity, apparent relative density and bulk density 	Compliance with the clause is established based on the following results of the tests: <ul style="list-style-type: none"> Water absorption = 0.1%
F2 Hazardous Building Materials F2.3.1	ALTERNATIVE SOLUTION	Frontek® does not contain or emit harmful materials.

SOURCES OF INFORMATION

- Frontek® cerámica tecnológica en fachadas 04/2016
- Frontek® technical 01/2019
- Frontek® porcelain facades by extrusion 04/2018
- Frontek® Product Technical Statement 14/09/2017
- Declaration of Performance DdP Num 0302 01/01/2015
- AWTA Product Testing Test Number 17-005919 15/11/2017
- Arcplus laboratories Test Report 14/9117-1705 30/10/2014 & Test Report 7/15740-2362 19/01/2018