## FORMWORK WHITE MATT 350×1000



## Class 1 Building Product Information Requirements Self-Assessment

Product Name: FORMWORK WHITE MATT 350x1000

Product Identifier: FORWH35X100

Product Description: A glazed ceramic tile with an matt finish and a water absorption rate of less than 16.00%.

## **Building Code Obligations**

Code Clauses:

B2 - Durability

B2.3.1

C3 - Fire affecting areas beyond the

source

D1 – Access routes

D1.3.3

E3 – Internal moisture

E3.3.2, 3.3.3, 3.3.4

G3 - Food preparation and prevention of

contamination

G3.3.2

G6 - Airborne and Impact sound

G6.3.1





Scope	Use		
B2 Durability	See below Suitability table.		
C3 Fire	The Building Code relating to fire ratings regulation and standards become mandatory from April 2013, establishing the list of products belonging to Classes A 'No Contribution to Fire' provided for in Decision 94/611/EC implementing Article 20 of Council Directive 89/106/EEC.		
D1 Access Routes	Not acceptable for use under D1/AS1		
E3 Internal Moisture	Under E3 Tiles installed over a waterproof membrane using a nonporous Grouting system, are an acceptable solution.		
G3 Food Preparation and Prevention from Contamination	As an Impervious and easy to clean Surface this range complies		
G6 Airborne and Impact Sound	borne and Impact If required Tiles can form part of an acoustic system to comply with IIC a STC in conjunction with an approved third-party system.		

Suitability	Residential	Light Commercial	Commercial	Industrial
Indoor Floor	-	-	-	-
Indoor Walls	✓	✓	✓	✓
Outdoor Floor	-	-	-	-
Outdoor Cladding	-	-	-	-
Frost Resistant	-	-	-	-
Swimming Pool Submerged	-	-	-	-
Swimming Pool Surround	-	-	-	-
Paving	-	1	-	-
Over Underfloor Heating	-	-	-	-
Commercial Kitchen Wall	-	-	-	-
Within 1.5m of a Plumbing Fixture or Fitting	✓	<b>√</b>	<b>✓</b>	✓

Specifications				
CODE	FORWH35X100			
TILE SIZE (mm)	350x1000			
THICKNESS (mm)	8			
SUITABILITY	Wall			
FINISH	Matt			
CLASS	PEI Class 0: Glazed tles in this class are wall tiles only and unsuitable for			
	use on floors.			
RECTIFIED	Yes			
WEIGHT (kg)	6.24			
COEFFICIENT OF FRICTION				
SLIP RATING				
TILES PER BOX	3			
M2 PER BOX	1.05			
PATTERNS/FACES	12			
COUNTRY OF ORIGIN	Portugal			

## Building Code Clause and Contribution

## **B2** - Durability

Compliance with B2 Durability is about providing evidence that the product will meet the relevant durability life in the context of the environment in which it will be located.

The building code sets out the framework for establishing the relevant durability life of building elements based on a number of criteria. B2/AS1 provides a decision tree to establish the relevant durability for common building materials in different circumstances.

Having determined the durability life of the product, the next step is to determine if the product, when exposed to the environment, will continue to perform for the relevant period. A key tool which a product supplier can consider in claiming compliance is limiting the environment in which the product will be exposed to (e.g. a ferrous material used in an indoor environment will last longer than it would when exposed to salt spray — in this example it would be appropriate for the supplier to condition the compliance information to use only in indoor environments).

## C3 - Fire affecting areas beyond the source.

C3 Fire affecting areas beyond the fire source is primarily about ensuring that fire does not spread from a fire in the building (in both vertically and horizontally) and from an adjacent building.

The prime product attribute used is the fire resistance rating (FRR) methodology. In most cases a product is combined with other products to achieve a FRR (e.g. an external wall fire rating may be formed by the combination of the external cladding, thermal insulation and the internal lining.

C/AS1 and C/AS2 set out performance criteria for buildings and in particular the FRR requirements for various types of buildings and parts of buildings. Appendix C of C/AS2 sets out test methods for the building elements involved in spread of fire. Appendix B of C/AS2 sets out performance criteria for sprinkler systems while Appendix A sets out criteria for fire safety systems such as alarms and hydrants.

## D1 - Access routes

For D1 access routes, in most cases product-related compliance for access routes are slip resistance for floors and the shapes/locations etc of handrails. The Acceptable Solution for access D1/AS1 and NZS 4121:2001 provide good information on compliance for products on access routes.

#### E3 - Internal Moisture

E3 Internal Moisture is about ensuring that moisture created within the building does not lead to mould or create damage to adjacent buildings or structural elements in the building in which it is installed. Prevention of the creation of mould is a combination of temperature, insulation and ventilation. Prevention of water damaging other building elements is mainly about installation details (i.e. sealing joints) as well as impervious products. E3/AS1 provides some useful design details, albeit without much product material information.

## G3 - Food preparation and prevention of contamination

G3 Food preparation and prevention from contamination for a product (such as a kitchen bench) is mainly associated with being easily cleaned and impervious.

G3/AS1 provides some general design details for food preparation areas but has no referenced product standards, although the document does state some acceptable materials used for surfaces. Compliance with G3/AS1 is not mandatory but provides a good benchmark for compliance.

## **G6 - Airborne and Impact Sound**

For a product, G6 Airborne and impact sound is generally about systems which are designed to work together to achieve the necessary sound attenuation.

The code itself at G6.3.2 sets a quantifiable performance level: "The Sound Transmission Class of walls, floors and ceilings, shall be no less than 55" and G6.3.2 sets the impact insulation class of floors shall be no less than 55. The Acceptable Solution G6/AS1 sets out the transmission and impact insulation class of common wall systems. G6/VM1 sets out test methodologies where the details do not match those of G6/AS1.

tile

Manufacturer Details: Importer Details:

Website: www.tilewarehouse.co.nz

## **Tender Specifications**

Supply of ceramic wall and floor tiles

#### Product characteristics

### Single Fired Wall Tiles

The white body product is composed of a mixture of quality clay with the addition of feldspar, quartz and kaolin. It is manufactured by dry pressing of atomized powder, with the application of enamel, and then sintered by industrial burning at temperatures above  $1100^{\circ}$ C.

The product is resistant to cracking, bending, impact, staining, chemical attack and thermal shock.

The Core collection complies with the regulations required for top quality products in Europe according to EN 14411-L and internationally through ISO 13006-L.

#### Quality and environmental certifications

The conservation of the product characteristics is guaranteed by the Quality Management System put into practice by Gres Panaria Portugal in its plants and certified in accordance with EN ISO 9001.

The collection is manufactured in plants with EN ISO 14001 certified Environmental Management Systems (internationally recognized standard) and EMAS (Regulation 1221/09 - eco-management and audit community system). The collection helps to meet the criteria for obtaining LEED credits.

Commercial description of the product			
Company	Love Ceramic Tiles		
Collection	Core		
Colours	lours White, Beige, Light Grey, Grey		
Sizes	35x100 RET.		
	30x60 RET.		
Finish - Surface	- Surface Matt - Matt looking surface. Recommended for interior wall cladding.		
Finish - Edge	Edge Rectified (RET), Non Rectified		
Thickness	8mm _ 35x100   7mm _ 30x60		















## **Tender Specifications**

#### Technical features

Product type: **Single Fired Wall Tiles**According to: ISO 13006 - Annex L (Group BIII), EN 14411 - Annex L (Group BIII)

Technical features		Test method	Prescribed Value	Typical Value
Dimensions	Lenght and width		Non Rect. ± 0,6%, max ± 2,0 mm Rect. ± 0,3%, max ± 1,0 mm	Conform
	Side straightness	EN ISO 10545-2	Non Rect. ± 0,5%, max ± 2,0 mm Rect. ± 0,3%, max ± 1,5 mm	Conform
	Rectangularity		Non Rect. ± 0,5%, max ± 2,0 mm Rect. ± 0,3%, max ± 1,5 mm	Conform
	Warpage - Center and edge curvature		Non Rect. ± 0,5%, max ± 2,0 mm Rect. ± 0,4%, max ± 1,8 mm	Conform
	Warpage		Non Rect. ± 0,5%, max ± 2,0 mm Rect. ± 0,4%, max ± 1,8 mm	Conform
	Thickness		± 10% , max ± 0,5 mm	Conform
Wate	r absorption (E)	EN ISO 10545-3	E > 10%	16%
Modulus of rupture			<7,5mm ≥ 15 N/mm² ≥7,5mm ≥ 12 N/mm²	22 N/mm² 19 N/mm²
Brea	king strength (S)	EN ISO 10545-4	<7,5mm S ≥ 200 N ≥7,5mm S ≥ 600 N	600 N 700 N
Linea	ar thermal expansion	EN ISO 10545-8	As indicated by manufacturer	α ≤ 7,5x10 ° °C-¹ Maximum value
Therr	mal shock resistance	EN ISO 10545-9	Required	Resistant
Crazi	ing resistance	EN ISO 10545-11	Required	Resistant
Resis	stance against acids and alkalis	EN ISO 10545-13	As indicated by manufacturer	GLB
Resis produ	stance to household cleaning ucts		Minimum: GB	GA
Stain	Resistance	EN ISO 10545-14	Minimum: class 3	4
Reco	mended joint	Non rectified Indoor Rectified Indoor	-	3 mm 2 mm

It is guaranteed the compliance with the values required by norm EN 14411\_Group Bill. Typical Value is merely indicative, which can vary from real data, and does not have the purpose of any trading proposal.















## FIRE PERFORMANCE

# **BE 100% CONFIDENT IN THE**PRODUCTS YOU SPECIFY

The Grenfell Tower tragedy in London highlights the importance to specifiers of ensuring the products they specify (from flooring to cladding materials) are fire-resistant in order to conform to the building code relating to fire rating regulations.



## TILES DO NOT REQUIRE TESTING AS THEY DO NOT CONTRIBUTE TO FIRE

In New Zealand, fire ratings are required by the Building Code to ensure that if a building is on fire, its construction materials do not significantly increase the spread or intensity of a fire. Tiles, being non-combustible, do not require testing as they do not contribute to fire. Aside from this, tiles by nature do not contain any form of petroleum-based product or wood fibres and are in essence, fire-proof and non toxic!

The building code relating to fire rating regulations and standards became mandatory from April 2013, establishing the list of products belonging to Classes A 'No contribution to fire' provided for in Decision 94/611/EC implementing Article 20 of Council Directive 89/106/EEC.

#### WHAT YOU NEED TO KNOW:

- Because most ceramics are manufactured at over 1000 degrees celsius, they become fire-resistant and therefore an obvious choice for both commercial and residential floor and wall surfaces. For example, if a lighted cigarette is dropped on the floor, it will not do any damage to the tile. Even hot kitchen pans or skillets will not scorch or melt the surface of tile, let alone set the tile on fire.
- Tiles are non-combustible so do not catch fire, nor do they give off toxic fumes in the form of VOC's (Volatile Organic Compounds) affecting breathing, when exposed to fire.
- During the manufacture of tiles, any VOC's that may have been present in clays or binders are completely burned away which ensures the final product is inert.







A safe and simple approach with regards to Fire performance in products is to utilise tile for both **Floor** and **Wall** areas. To view latest styles and designs to suit Commercial Projects, see our tile and stone range;

https://www.tilewarehouse.co.nz/tile-stone-range/