# TOOL LIGHT GREY LAPPATO 450x900



Class 1 Building Product Information Requirements Self-Assessment

Product Name: TOOL LIGHT GREY LAPPATO 450x900

Product Identifier: TOOLIGRL45X90

Product Description: A full body porcelain tile with an lappato finish and a water absorption rate of less than 0.03%.

### **Building Code Obligations**

Code Clauses: <u>B2 – Durability</u> B2.3.1 <u>C3 – Fire affecting areas beyond the</u> <u>source</u> D1 – Access routes D1.3.3 <u>E3 – Internal moisture</u> E3.3.2, 3.3.3, 3.3.4 <u>G3 – Food preparation and prevention of</u> <u>contamination</u> G3.3.2 <u>G6 – Airborne and Impact sound</u> 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	E3 Internal Moisture (AS1 and AS2) 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 about a complete system and installation details (i.e. Compliant and approved Waterproofing and sealing joints) as well as impervious products. E3/AS1 provides some useful design details, albeit without much product material information on compliant systems that meet the durability requirements of B2 that requires 15 years performance and a Producer Statement (PS3) for waterproofing.
G3 Food Preparation and Prevention from Contamination	As an Impervious and easy to clean Surface this range complies
G6 Airborne and Impact Sound	If required Tiles can form part of an acoustic system to comply with IIC and STC in conjunction with an approved third-party system.

Suitability	Residential	Light Commercial	Commercial	Industrial
Indoor Floor	✓	✓	✓	~
Indoor Walls	~	$\checkmark$	✓	✓
Outdoor Floor	✓	-	-	-
Outdoor Cladding	✓	$\checkmark$	✓	✓
Frost Resistant	~	$\checkmark$	✓	✓
Swimming Pool Submerged	✓	$\checkmark$	✓	✓
Swimming Pool Surround	✓	-	-	-
Paving	-	-	-	-
Over Underfloor Heating	✓	$\checkmark$	✓	~
Commercial Kitchen Wall	✓	✓	✓	$\checkmark$
Within 1.5m of a Plumbing Fixture or Fitting	✓	$\checkmark$	$\checkmark$	$\checkmark$

Specifications					
CODE	TOOLIGRL45X90				
TILE SIZE (mm)	450x900				
THICKNESS (mm)	10				
SUITABILITY	Floor/Wall				
FINISH	Lappato				
CLASS	Full body (through bodied) porcelain - Moderate to heavy traffic, All				
	residential applications as well as heavy commercial.				
RECTIFIED	Yes				
WEIGHT (kg)	9.40				
COEFFICIENT OF FRICTION					
SLIP RATING					
TILES PER BOX	2				
M2 PER BOX	0.81				
PATTERNS/FACES	16				
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.

Note – this building product is not subject to a warning or ban under section 26 of the Building Act 2004

### 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.



Importer Details: Tile Warehouse Limited Address: 286 Church Street, Onehunga, AKL 1061 NZBN: 9429041069448 Website: <u>www.tilewarehouse.co.nz</u>

# TOOL

## 

		-					
size (cm) format formate formato	Finishing Finition Fertigung Acabamento	Z	x	v	т	C	R
60x60	NR_TC_A	-	-	-	599,8	595,0	592,0
00X00	E AS	598,0	-	-	-	-	-
45x90	NR_A	-	446,5x895,0	444,0x890,0	-	-	442,0x886,0
90x90	NR_A_AS	-	895,0	890,0	-	-	-

#### Calibers \_ Calibres \_ Kaliber \_ Calibres

#### Package \_ Emballage \_ Verpackung \_ Embalagem

	box _ boîte _ karton _ caixa			pallet _ palette _ palette _ palete			pallet dimension _ dimensions des palettes paletten abmessungen _ dimensões paletes		
size format formate formato	sqm m²	pieces pièces stück peças	weight poids gewicht peso [kg]	sqm m²	boxes boîtes kartonen caixas	weight poids gewicht peso (kg)	width largeur breite largura (cm)	length longueur laenge comprimento (cm)	height hauteur höhe altura (cm)
60x60 NR_A_TC	1,08	3	24,10	43,20	40	995	80	120	75
60x60 <b>E AS</b>	0,715	2	33,60	22,88	32	1103	80	120	75
45x90 NR_A	0,80	2	17,90	35,20	44	825	100	120	60
90x90 NR_A_AS	1,60	2	41,40	64,00	40	1685	93	120	105
mosaic 5x5 30x30 NR	0,54	6	8,90	-	-	-	-	-	-
mosaic hexagon 24,6x26,6 <b>NR</b>	0,38	6	7,60	-	-	-	-	-	-
bricks 33x33 NR_A	0,98	9	20,00	-	-	-	-	-	-
barra Tool 10x60 NR_TC	-	15	19,40	-	-	-	-	-	-
insert gold _ silver 10x10	-	20	4,30						
step tread grooved 30x60 NR_A_TC	-	6	22,60	-	-	-	-	-	-
step tread grooved 60x60 NR_A_TC	-	3	24,40	-	-	-	-	-	-
step tread grooved 45x90 NR_A_AS	-	2	18,80	-	-	-	-	-	-
step extra thick 30x60 NR_A_TC	-	2	10,00	-	-	-	-	-	-
step extra thick corner 30x60 NR_A_TC	-	1	5,00	-	-	-	-	-	-
step extra thick inox 30x60 NR_A_TC	-	2	8,10	-	-	-	-	-	-
step extra thick inox Corner 30x60 NR_A_TC	-	1	5,00	-	-	-	-	-	-
skirting 8x60 NR_A_TC	-	13	15,20	-	-	-	-	-	-
skirting 8x90 NR_A	-	11	17,60	-	-	-	-	-	-
20MM special pieces 15x60 E AS	-	2	4,18	-	-	-	-	-	-
20MM special pieces corners 15x60 E AS	-	1	7,25	-	-	-	-	-	-
20MM special pieces 30x30 E AS	-	4	13,00	-	-	-	-	-	-
20MM special pieces 30x60 E AS	-	2	16,75	-	-	-	-	-	-
20MM special pieces corners 30x60 E AS	-	1	25,12	-	-	-	-	-	-
20MM special pieces 60x60 E AS	-	1	13,49	-	-	-	-	-	-

The featured weights are approximate. The quantities of sqm (m<sup>2</sup>)/pieces per box/palette may exceptionally vary and shall be confirmed by Margres. Les poids présentés sont approximatés. Les quantités m<sup>2</sup>/pieces par bolte/palette peuvent exceptionnellement varier. Nous vous prions donc de bien vouloir confirmer auprès de Margres. Die angegebenen Gewichte sind Naherungswerte. Die Mengen, m<sup>2</sup>/Stücke pro Verpachung/Palette Können in Einzefällen adweichen, weshalls bie bei Margres bestängt werden sollten. Os pesos apresentados são aproximados. As quantitades m<sup>2</sup>/peças por caixa/palete podem excepcionalmente variar, pelo que agradecemos a confirmação junto da Margres.



# TOOL



#### Technical Data \_ Données Techniques \_ Technischen Eigenschaften \_ Características Técnicas

Technical data Données techniques Technische eigenschaften Características técnicas		Directives Normes Normen Normas	Directives values Valeur norme Richtlinie werten		<b>TOOL</b> Standard Average Value Valeur Moyenne Typischer Durchschnittswert Valor Tipico Médio	
<u></u>	Thickness Épaisseur Stärke Espessura	ISO 10545 - 2	±5%	(max.) (max.) (max.) (máx.)	60x60 EAS 20mm 90x90 NR_A_AS 11mm 45x90 NR_A_9.5mm 60x60 NR_TC_A 9.5mm	
	Modulus of ruture Module de rupture Biegung Modul Módulo de ruptura	ISO 10545 - 4	35N/mm²	(min.) (min.) (min.) (mín.)	50N/mm²	
	Breaking strength (S) Résistance à la flexion (S) Biegfestigkeit (S) Resistência à flexão (S)	ISO 10545 - 4	≥ 1300 N		60x60 20 mm 11000N 90x90 11 mm 3900N 45x90 9.5 mm 2900N 60x60 9.5 mm 2900N	
<u>:</u>	Linear thermal expansion coeficient Coeficient de dilatation thermique linéaire Linearer thermischer Ausdehnungskoeffient Coeficiente de dilatação térmica linear	ISO 10545 - 8	Manufacturer's standard Valeurs du fabricant Hersteller Werte Valores do fabricante		6,5°10-5/°C (max.)	
	Chemical resistance Résistance chimique Chemische Beständigkeit Resistência química	Cahier CSTB 3735	Manufacturer's standard Valeurs du fabricant Hersteller Werte Valores do fabricante	UGL	3 No alteration Aucune modification Unverandert Sem alteração	
*	Frost resistance Résistance au gel Frostbeständigkeit Resistência ao gelo	ISO 10545 - 12	Required Nécessaire Anforderung Exigida		Yes Oui Ja Sim	
	Water absorption Absortion d'eau Wasseraufnahme Absorção de água	ISO 10545 - 3	±0,5%	(max.) (max.) (max.) (máx.)	± 0,03%	
₹¢	Deep abrasion resistance Résistance a L'abrasion profonde Widerstand gegen Tiefenverschleiß Resistência à abrasão profunda	ISO 10545 - 6	175mm³	(max.) (max.) (max.) (máx.)	123 mm <sup>3</sup>	
×.	Stain resistance Résistance aux taches Beständigkeit gegen Fleckenbildner Resistência a manchas	ISO 10545 - 14	Manufacturer's standard Valeurs du fabricant Hersteller Werte Valores do fabricante	UGL	4 - 5 Simple removal Enlèvement simple Einfache Entfernung Remoção simples	
**	Thermal shock resistance Résistance au choque thermique Temperaturwechselbeständigkeit Resistência ao choque térmico	ISO 10545 - 9	Manufacturer's standard Valeurs du fabricant Hersteller Werte Valores do fabricante		Yes Oui Ja Sim	
	Slipping resistance Résistance au glissement Trittsicherheit-Rutschfestigkeit Resistência ao escorregamento	DIN51130	- Manufacturer's standard Valeurs du fabricant Hersteller Werte Valores do fabricante		AS R11 EAS R11 NR R10	
<u></u>		DIN51097			AS Class C E AS Class C NR Class A	
		BS7976			EAS ≥36 NR ≥36	
	Shade variation Denuançage Farbspiel Destonalização	ANSI A137.1	V0 None _ Nul _ Gleich Nul V1 Minor _ Léger _ Leicht _ V2 Low _ Faible _ Gering _ V3 Medium _ Moyen _ Mitte V4 Major _ Élevé _ Stark	_ Ligeiro Baixo	Moderate variation Variations modérées Mäßige Variationen Variação moderada	

MARGRES

# FIRE PERFORMANCE BE 100% CONFIDENT IN THE PRODUCTS YOU SPECIFY



If 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/