



TONALITY is an extruded natural clay tile with an optional glazed surface, used for external cladding, soffits, weatherboards, louvers, sunscreens and internal linings. The many colour options and the superior surface quality with optional graffiti protection make this product an essential choice for modern and contemporary architecture.

Product Information

1. Product composition

TONALITY cladding tiles consist of

- dry processed clay
- water
- mineral pigments

2. Production process

TONALITY cladding tiles are vacuum-extruded at a pressure of more than 28 bar, dried and fired in a modern furnace. The manufacturing plant in Weroth, Germany is one of the world’s most modern and automated plants. The excellence of the raw materials and the high baking temperatures create one of the best quality clay tiles available in the market. The clay is first double-dried, then processed to extreme fine powdered clay, dye penetrated in finely graduated ratios of colour mixtures and afterwards fired at temperatures exceeding 1200°C.

Due to the extrusion production process, the surface of the tiles has small variations in density. Depending on the finish of the tiles and under sheer light, this may result in a soft pattern. The purity of the clay and advanced Keralis Production Process are the reasons Tonality clay tiles are regarded as the premium tile in the market.

TONALITY Clay Tiles are not required to **and cannot** be repainted. Consult PBS Distributors before applying other coatings on the product.

3. Dimensions and tolerances

- **Available thicknesses:** 22, 26 and 34 mm
 - **Dimensions :**
 - o **Height:** between 150 and 600 mm in multiples of 50 mm
 - o **Length:** between 400 and 2000 mm, no multiples required. (2000 mm long tiles are not available in tiles that are less than 200 mm high).
- Important remark:** not all dimensions are available for every colour. Please check with PBS Distributors or in paragraph 5. **Colour and Surface.**

Tolerances

| | |
|-----------|---------------|
| | After cutting |
| Flatness | < 0.7% |
| Thickness | +/- 1.5 mm |

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| | |
|------------|------------|
| Height | +/- 2.0 mm |
| Length | +/- 1.0 mm |
| Squareness | 2.5 mm / m |

4. Weight (tile and structure)

| Thickness | Weight |
|-----------|------------------------|
| 22 mm | 32.0 kg/m ² |
| 26 mm | 35.0 kg/m ² |
| 34 mm | 50.0 kg/m ² |

5. Colour and surface

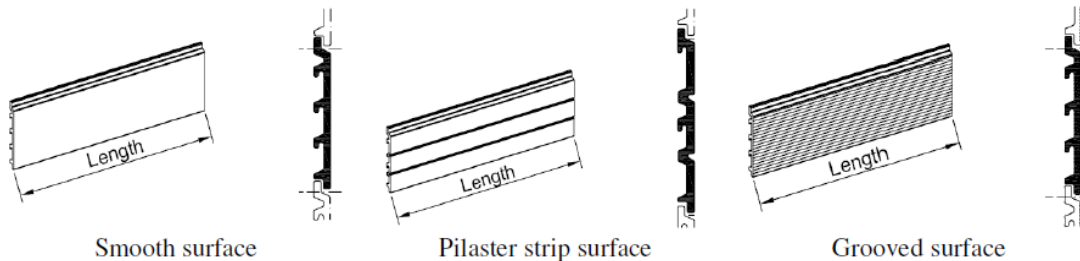
TONALITY offers a wide cladding range.

- TONALITY CLASSIC: 7 colours with a natural surface.
- TONALITY CLASSIC GLAZED: 17 colours with a glazed surface protection.
- TONALITY SPECIAL BRIGHT COLOURS: 4 colour shades with living streaked appearance. *
- TONALITY COLOR: Over 30 different even colours with glazed protective surface. *
- TONALITY Lamelles, Baguettes and Quadrat sun screens: please contact PBS Distributors for more information.

* only available in 200 x 400 or 200 x 450 with smooth finish and in 22 mm thick.

TONALITY cladding tiles are available in the following surface finishes:

- Smooth surface
- Pilaster strip surface
- Grooved surface



6. Technical properties (average values)

TONALITY cladding tiles demonstrate the following technical characteristics:

- Water absorption < 6% weight.
- The cladding tiles are frost-resistant in accordance with the testing requirements of DIN EN 539-2.
- Resistant to pressure according to DIN EN 1304: 0.70 kN load on the front face and 1.27 kN load on the back face.
- The cladding tiles and the aluminium profiles are non-inflammable (Building material classification DIN 4102-A1 according to DIN 4102-4). The neoprene seals meet the requirements of normal inflammability (Building material classification DIN 4102-B2)

Materials of the support frames:

- CLS (Classic Profile System) system consists of the aluminium alloy EN AW 6060 according to DIN EN

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755-2, material condition T66.

7. Advantages

TONALITY cladding tiles have the following properties:

- Light weight system compared to other clay tile systems, due to its specific section
- Aesthetic appeal in different colours, surface finishes and formats
- Range of retaining sub-constructions to meet variable requirements
- Original appearance after years of atmospheric exposure is achieved by the unique and complete dye penetration process.
- Maintenance-free
- Speed of installation
- Simplicity of tile replacement
- Thermal efficiency by limiting heat loss due to wind convection
- Resistant to aggressive environmental conditions
- Optimal heat insulation and water vapour diffusion
- Reduction of thermal bridges
- Durable and UV resistant materials

8. Application data

Cutting and drilling:

- PBS Distributors operates a CNC waterjet cutting machine in its Auckland factory and can provide customised lengths of tiles.

On site cutting:

- For cutting and shaping of the cladding tiles, we recommend wet cutters to reduce dust.
The recommended cutting device is a Cross-cut drop saws fitted with ceramic or diamond tipped cutting blades
- For drilling purposes, we recommend the use of carbide or diamond coated twist drills.
- Mitre cuts should be performed by PBS Distributors. Tiles with mitre cuts have to be ordered immediately with the order for tiles and structure. .

Repairs and touch-ups are possible using PBS supplied cold engobe in the respective façade colours. This cold engobe is brush applied onto the dry cladding tile, which must be free of contamination.

9. Health and safety aspects

While the tiles are being processed, dust will be released which may irritate airways and eyes. It is recommended that a minimum P2 dust mask and safety goggles be worn. Appropriate dust extraction or proper ventilation should be used depending on the room in which the work is being carried out or the equipment being used. Long-term exposure to dust may be harmful to health.

10. Maintenance and cleaning

For minor soiling, washing with a mild household detergent or soft soap solution followed by rinsing with clear water.

GRAFFITI PROTECTION₂: The TONALITY cladding tiles have an efficient, lasting and immediately effective graffiti protection that is already included in the KERALIS baking procedure. The graffiti protection will not degrade and renewal of the protection is not required. Cleaning is possible with any cleaning agent that is not harmful to the environment for the removing of graffiti coats. We refer to the PBS cleaning instructions for more specific guidelines.

11. Handling

The tiles and substructure are packed on pallets. They must be kept dry during transport. The products must be horizontally stacked on a flat surface and cannot be stacked in piles on top of each other. The clay tiles must always be sufficiently supported so that they do not sag. The tiles must be stored in a dry ventilated space. If the tiles are stored outside, they must always be protected against rain

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by a tarpaulin or plastic sheet. If the materials do become wet in the packing, all packaging must be removed and the tiles must be wiped dry and placed in a way that they can dry completely. Tiles of over 1000 mm long must always be lifted from a stack by two people and then be carried on edge.

12. Guarantee

The guarantee and the guarantee conditions are available on request from PBS Distributors,