| TECHNICAL PRODUCT SHEET |  |  |
| :---: | :---: | :---: |
| MODEL | TYNDALL WHITE 6060 REC |  |
| SIZE | NOMINAL SIZE: | $60 \times 60$ |
|  | WORK SIZE: | $598,0 \times 598,0 \times 9,0$ |
| PRODUCT TYPE |  | PORCELAIN |
| SURFACE FINISHING | RECTIFIED |  |


| PROPERTIES | MEASURES TOLERANCES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | UNE - EN - 14411 |  | FANAL |  | TEST STANDARD |
| DIMENSIONS AND SURFACE QUALITY | mm | \% | mm | \% |  |
| LENGTH AND WIDTH <br> Permissible deviation of the average measurement of each tile (4 sides) with respect to the manufacturing dimension (working size) | $\pm 2,0$ | $\pm 0,6 \%$ | $\pm 0,4$ | $\pm$ 0,05 \% | EN - ISO-10545-2 |
| THICKNESS <br> Admissible deviation of the average thickness of each tile with respect to the manufacturing thickness | $\pm 0,5$ | $\pm 5,0 \%$ | $\pm 0,3$ | $\pm 3,0 \%$ | EN - ISO-10545-2 |
| STRAIGHTNESS OF SIDES (FACIAL SIDES) <br> Maximum allowable deviation of straightness in relation to the corresponding manufacturing dimension | $\pm 1,5$ | $\pm 0,5 \%$ | $\pm 0,5$ | $\pm 0,1 \%$ | EN - ISO-10545-2 |
| ORTHOGONALITY <br> Maximum allowable deviation from orthogonality in relation to the corresponding manufacturing dimension | $\pm 2,0$ | $\pm 0,5 \%$ | $\pm 0,8$ | $\pm 0,1 \%$ | EN-ISO-10545-2 |
| SURFACE FLATNESS <br> Maximum allowable deviation from flatness: <br> A) Central curvature in relation to diagonal calculated with the manufacturing dimension | $\pm 2,0$ | $\pm 0,5 \%$ | $\pm 1,0$ | $\pm 0,16 \%$ | EN - ISO-10545-2 |
| B) Lateral curvature in relation to the corresponding manufacturing dimension | $\pm 2,0$ | $\pm 0,5 \%$ | $\pm 1,0$ | $\pm 0,16 \%$ | EN - ISO-10545-2 |
| C) Warpage in relation to the diagonal calculated with the corresponding manufacturing dimension | $\pm 2,0$ | $\pm 0,5 \%$ | $\pm 1,0$ | $\pm 0,16 \%$ | EN - ISO-10545-2 |


| RECOMMENDED USE |  |  |
| :--- | :---: | :---: |
| Glazed wall tiles. Not recommended for floors or outdoors with <br> sub-zero temperatures. | A |  |
| Use for low traffic areas with soft footwear (bathrooms, <br> bedrooms, without direct access from the outside). | B |  |
| Use for areas with moderate traffic, with soft or normal <br> footwear (private homes), avoiding places with considerable <br> traffic | C |  |
| Use for medium traffic areas, with normal footwear. Advisable <br> for all areas of private homes (kitchens, corridors, terraces, etc). <br> Also for offices | D |  |
| Use suitable for commercial areas with regular traffic, <br> commercial premises, hotels, shops, showrooms. Material with <br> good abrasion resistance | E | $\mathbf{X}$ |
| High traffic, use in areas of very intense traffic, highly resistant <br> to wear. Products generally with a good slip resistance | H |  |

## TECHNICAL PRODUCT SHEET

MODEL
TYNDALL WHITE 6060 REC

| PRODUCTION PROCESS | DRY PRESSED CERAMIC TILE, MANUFACTURED IN A SINGLE-FIRING PROCESS | UNE - EN - 14411 |
| :--- | :---: | :---: | :---: |
| SURFACE ASPECT At least $95 \%$ of the tiles must be free of visible defects that could harm the appearance of <br> a tile surface  | EN - ISO - 10545-2 |  |


| PHYSICAL PROPERTIES |  |  |
| :---: | :---: | :---: |
| WATER ABSORPTION (\% WEIGHT) | < 0,5\% | EN - ISO-10545-3 |
| BREAKING FORCE (N) | $>1.300 \mathrm{~N}$ | EN - ISO-10545-4 |
| MODULUS OF RUPTURE ( $\mathrm{N} / \mathrm{mm} 2$ ) | $>35 \mathrm{~N} / \mathrm{mm} 2$ | EN - ISO-10545-4 |
| ABRASION RESISTANCE (USE FLOORS) | PEIIV | EN - ISO-10545-7 |
| SLIP RESISTANCE (USE FLOORS) | R 10-B | UNE - ENV - 12633 |
| FROST RESISTANCE | PASS | EN - ISO-10545-12 |
| THERMAL SHOCK RESISTANCE | PASS | EN - ISO-10545-9 |
| CRACKING RESISTANCE | PASS | EN - ISO-10545-11 |


| PHYSICAL PROPERTIES |  |  |
| :---: | :---: | :---: |
| CHEMICAL RESISTANCE |  |  |
| Resistance to low concentrations of acids and bases | MINIMUM GHB CLASS | EN - ISO-10545-13 |
| Resistance to high concentrations of acids and bases | MINIMUM GHB CLASS |  |
| Resistance to household cleaning products | MINIMUM GHB CLASS |  |
| Resistance to pool additives (SALTS) | MINIMUM GHB CLASS |  |
| STAIN RESISTANCE | CLASS - 5 | EN - ISO - 10545-14 |

## USAGE AND MAINTENANCE RECOMMENDATIONS

Before placing the product, it must be verified that the material meets the appropriate characteristics for the place of use. The product is identified in the boxes with the reference of the model, tone / Shade, class and caliber. Do not mix boxes with different tones / shade or quality when placing the product.
Handle the product with care to avoid unwanted shocks before installation.
The wall or floor to be covered must be perfectly level, not showing flatness defects. Prior waterproofing is recommended in humid environments.
The surface must be perfectly clean before placing the product.
The adhesive must be suitable for the product to be installed, the characteristics of the support to be coated as well as the material to be installed must be taken into account.
For formats larger than $30 \times 30 \mathrm{cms}$. The double gluing system is recommended, that is, applying the adhesive to both the floor and the tile.
It is recommended in rectified products, not to place the material with a joint less than 1.5 mm . It is also recommended in this type of products to use elements for levelling the material such as wedges or levelling bells, which help to correctly position the tiles among themselves.
In brick bond placement of the product, it is advisable not to move more than $25 \%$ of the piece with respect to the adjoining tile.
The material must not be grouted with products with carbon black. It is advisable to use waterproof joints to avoid water seepage that could affect the adhesive of the tiles.
Perimeter joints that absorb post-construction movements must always be considered, the width must be at least 5 mm and they can be filled with compressible material.
Before grouting, check that the installation joints are empty and free of bonding material and dirt. Any intermediate agent reduces the effectiveness of the tile joint, making it difficult to adhere to it. The grouting material will be applied with a rubber trowel, avoiding any metallic type utensil that could damage the surface of the tile. The filling of the joints will be carried out when the tiles are perfectly adhered to the support.
The removal of the material remains should be done with a sponge moistened with clean water; This operation should not be prolonged in time, since excess time of the bonding material in contact with the surface of the tile makes it difficult to remove the residues later.
It is essential to protect the material placed with adequate systems, to prevent possible damage until the end of the work, due to the presence of abrasive materials and the continuous transfer of tools. NEVER USE FLUORHYDRIC ACID FOR CLEANING OR SOLID DETERGENTS WITH PARTICLES.
THE PLACEMENT OF THE MATERIAL WILL BE UNDERSTOOD THAT IT HAS THE CUSTOMER'S ACCEPTANCE. NO CLAIMS OF THE MATERIAL WILL BE ACCEPTED ONCE PLACED.

TECHNICAL PRODUCT SHEET

| TECHNICAL PRODUCT SHEET |  |  |
| :---: | :---: | :---: |
| MODEL | TYNDALL WHITE 3060 REC |  |
| SIZE | NOMINAL SIZE: | $30 \times 60$ |
|  | WORK SIZE: | $298,0 \times 598,0 \times 9,0$ |
| PRODUCT TYPE |  | PORCELAIN |
| SURFACE FINISHING | RECTIFIED |  |


| PROPERTIES | MEASURES TOLERANCES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | UNE - EN - 14411 |  | FANAL |  | TEST STANDARD |
| DIMENSIONS AND SURFACE QUALITY | mm | \% | mm | \% |  |
| LENGTH AND WIDTH <br> Permissible deviation of the average measurement of each tile (4 sides) with respect to the manufacturing dimension (working size) | $\pm 2,0$ | $\pm 0,6 \%$ | $\pm 0,4$ | $\pm$ 0,05 \% | EN - ISO-10545-2 |
| THICKNESS <br> Admissible deviation of the average thickness of each tile with respect to the manufacturing thickness | $\pm 0,5$ | $\pm 5,0 \%$ | $\pm 0,3$ | $\pm 3,0 \%$ | EN - ISO-10545-2 |
| STRAIGHTNESS OF SIDES (FACIAL SIDES) <br> Maximum allowable deviation of straightness in relation to the corresponding manufacturing dimension | $\pm 1,5$ | $\pm 0,5 \%$ | $\pm 0,5$ | $\pm 0,1 \%$ | EN - ISO-10545-2 |
| ORTHOGONALITY <br> Maximum allowable deviation from orthogonality in relation to the corresponding manufacturing dimension | $\pm 2,0$ | $\pm 0,5 \%$ | $\pm 0,8$ | $\pm 0,1 \%$ | EN-ISO-10545-2 |
| SURFACE FLATNESS <br> Maximum allowable deviation from flatness: <br> A) Central curvature in relation to diagonal calculated with the manufacturing dimension | $\pm 2,0$ | $\pm 0,5 \%$ | $\pm 1,0$ | $\pm 0,16 \%$ | EN - ISO-10545-2 |
| B) Lateral curvature in relation to the corresponding manufacturing dimension | $\pm 2,0$ | $\pm 0,5 \%$ | $\pm 1,0$ | $\pm 0,16 \%$ | EN - ISO-10545-2 |
| C) Warpage in relation to the diagonal calculated with the corresponding manufacturing dimension | $\pm 2,0$ | $\pm 0,5 \%$ | $\pm 1,0$ | $\pm 0,16 \%$ | EN - ISO-10545-2 |


| RECOMMENDED USE | A |  |
| :--- | :---: | :---: |
| Glazed wall tiles. Not recommended for floors or outdoors with <br> sub-zero temperatures. | B |  |
| Use for low traffic areas with soft footwear (bathrooms, <br> bedrooms, without direct access from the outside). | C |  |
| Use for areas with moderate traffic, with soft or normal <br> footwear (private homes), avoiding places with considerable <br> traffic | D |  |
| Use for medium traffic areas, with normal footwear. Advisable <br> for all areas of private homes (kitchens, corridors, terraces, etc). <br> Also for offices | D |  |
| Use suitable for commercial areas with regular traffic, <br> commercial premises, hotels, shops, showrooms. Material with <br> good abrasion resistance | E | $\mathbf{X}$ |
| High traffic, use in areas of very intense traffic, highly resistant <br> to wear. Products generally with a good slip resistance | H |  |

## TECHNICAL PRODUCT SHEET

MODEL
TYNDALL WHITE 3060 REC

| PRODUCTION PROCESS | DRY PRESSED CERAMIC TILE, MANUFACTURED IN A SINGLE-FIRING PROCESS | UNE - EN - 14411 |
| :--- | :---: | :---: | :---: |
| SURFACE ASPECT At least $95 \%$ of the tiles must be free of visible defects that could harm the appearance of <br> a tile surface  | EN - ISO - 10545-2 |  |


| PHYSICAL PROPERTIES |  |  |
| :---: | :---: | :---: |
| WATER ABSORPTION (\% WEIGHT) | < 0,5\% | EN - ISO-10545-3 |
| BREAKING FORCE (N) | $>1.300 \mathrm{~N}$ | EN - ISO-10545-4 |
| MODULUS OF RUPTURE ( $\mathrm{N} / \mathrm{mm} 2$ ) | > $35 \mathrm{~N} / \mathrm{mm} 2$ | EN - ISO-10545-4 |
| ABRASION RESISTANCE (USE FLOORS) | PEI IV | EN - ISO-10545-7 |
| SLIP RESISTANCE (USE FLOORS) | R 10-B | UNE - ENV - 12633 |
| FROST RESISTANCE | PASS | EN - ISO - 10545-12 |
| THERMAL SHOCK RESISTANCE | PASS | EN - ISO-10545-9 |
| CRACKING RESISTANCE | PASS | EN - ISO - 10545-11 |


| PHYSICAL PROPERTIES |  |  |
| :---: | :---: | :---: |
| CHEMICAL RESISTANCE |  |  |
| Resistance to low concentrations of acids and bases | MINIMUM GHB CLASS | EN - ISO-10545-13 |
| Resistance to high concentrations of acids and bases | MINIMUM GHB CLASS |  |
| Resistance to household cleaning products | MINIMUM GHB CLASS |  |
| Resistance to pool additives (SALTS) | MINIMUM GHB CLASS |  |
| STAIN RESISTANCE | CLASS - 5 | EN - ISO - 10545-14 |

## USAGE AND MAINTENANCE RECOMMENDATIONS

Before placing the product, it must be verified that the material meets the appropriate characteristics for the place of use. The product is identified in the boxes with the reference of the model, tone / Shade, class and caliber. Do not mix boxes with different tones / shade or quality when placing the product.
Handle the product with care to avoid unwanted shocks before installation.
The wall or floor to be covered must be perfectly level, not showing flatness defects. Prior waterproofing is recommended in humid environments.
The surface must be perfectly clean before placing the product.
The adhesive must be suitable for the product to be installed, the characteristics of the support to be coated as well as the material to be installed must be taken into account.
For formats larger than $30 \times 30 \mathrm{cms}$. The double gluing system is recommended, that is, applying the adhesive to both the floor and the tile.
It is recommended in rectified products, not to place the material with a joint less than 1.5 mm . It is also recommended in this type of products to use elements for levelling the material such as wedges or levelling bells, which help to correctly position the tiles among themselves.
In brick bond placement of the product, it is advisable not to move more than $25 \%$ of the piece with respect to the adjoining tile.
The material must not be grouted with products with carbon black. It is advisable to use waterproof joints to avoid water seepage that could affect the adhesive of the tiles.
Perimeter joints that absorb post-construction movements must always be considered, the width must be at least 5 mm and they can be filled with compressible material.
Before grouting, check that the installation joints are empty and free of bonding material and dirt. Any intermediate agent reduces the effectiveness of the tile joint, making it difficult to adhere to it. The grouting material will be applied with a rubber trowel, avoiding any metallic type utensil that could damage the surface of the tile. The filling of the joints will be carried out when the tiles are perfectly adhered to the support.
The removal of the material remains should be done with a sponge moistened with clean water; This operation should not be prolonged in time, since excess time of the bonding material in contact with the surface of the tile makes it difficult to remove the residues later.
It is essential to protect the material placed with adequate systems, to prevent possible damage until the end of the work, due to the presence of abrasive materials and the continuous transfer of tools. NEVER USE FLUORHYDRIC ACID FOR CLEANING OR SOLID DETERGENTS WITH PARTICLES.
THE PLACEMENT OF THE MATERIAL WILL BE UNDERSTOOD THAT IT HAS THE CUSTOMER'S ACCEPTANCE. NO CLAIMS OF THE MATERIAL WILL BE ACCEPTED ONCE PLACED.

