|  |  |  |
| --- | --- | --- |
| Ketley Quarry Tiles are manufactured from the same clay, using the same processes as Ketley Bricks and Pavers and Dreadnought Roof Tiles to deliver the same technical characteristics of very low water absorption, very high strength and unrivalled frost resistance. | | |
| **PROPERTIES** | **BS EN 14411 GROUP A1b REQUIREMENT** | **TYPICAL VALUES** |
|  |  |  |
| Dimensions and surface quality | |  |
| Length x Width  215mm x 102.5mm  215mm x 65mm  150mm x 150mm | Average tolerance ± 2% to an individual maximum of ± 4mm | within +/- 2% |
| Thickness  18mm | Average tolerance is ± 10% | within +/- 5.5% |
| Straightness of sides | within ± 0.6% | within 0.2% |
| Rectangularity | within ±1% | within 0.2% |
| Surface flatness | Centre curvature ± 1.5%  Edge curvature ± 1.5%  Warpage ± 1.5% | Centre curvature +/- 0.7%  Edge curvature +/- 1.0%  Warpage +/- 0.7% |
|  |  |  |
| Physical properties |  |  |
| Water absorption | 0.5 < 3% | 1.50% |
| Breaking strength | Min 1100N | 2995N |
| Resistance to deep abrasion | Max 275mm³ | 106mm³ |
| Frost resistance | Value to be stated | No damage after 100 cycles |
| Slip resistance | Pendulum test results exceeding  36 indicate low slip potential | Dry value av of 96 Wet value av of 58  on slider 55 for Staffs Blue  Dry value av of 63 Wet value av of 55  on slider 96 for Brown Brindle |
|  | Inclined platform in shod conditions | Category R11 which indicates that they are considered not to be slippery in wet or greasy conditions. |
|  | Inclined platform in wet barefoot conditions | Category C which is the highest rating for slip resistance. |
| Bond strength | C2 Cementatious adhesives  Reaction resin adhesives  Mortar | >1.0 N/mm² >2.0N/mm²  0.15N/mm² |
| Moisture expansion | No requirement | Negligible |
| Reaction to fire | Value to be stated | A1 |
|  |  |  |
| Chemical properties |  |  |
| Resistance to staining | Minimum requirement 3 | Paste stain 5 Chemical/oxydising stain 4 Film stain 3 |