

# Features and Benefits

## COMPOSITION AND MANUFACTURING

- Advanced composite polymer blend 'UV' inhibitors, blockers and absorbers, achieving an extremely LOW-MAINTENANCE product.
- Colours are vibrant and controlled by using a blend of 100% virgin resins and limestone.
- State-of-the-art moulding process produces a unique natural slate appearance on each tile.
- A more natural colouring is created by blending-in colour during the forming process.

## STABILITY – DIMENSIONAL AND 'UV'

- Product formulation results in minimal in-service product expansion/contraction on the roof.
- The 'UV' package allows the tile to weather evenly, just like natural slate.
- The colours are consistent from bundle-to-bundle, pallet-to-pallet, and therefore job-to-job.
- Product temperature for Classic Slate should be conditioned to 7°C

## PRODUCT DESIGN

- The product's camber design provides tight surface contact at the leading edge against wind and rain.
- Does not "flap in the wind", crack or delaminate, and is low-maintenance.
- Spacer tabs and centre marks eliminate the need to estimate keyway spacing.
- Nail/screw target provides fastener support to the deck surface.
- Dimensions are consistent from roof tile to roof tile.



## RATINGS



**BBA certification** is recognised by architects, building planners, Local Authorities, contractors and inspectors as the leading impartial product approval and certification body in the market. BBA certificates are awarded to products in the construction sector after having passed a series of comprehensive and rigorous assessments which are tailored to the individual needs of the manufacturer and in line with building specification guidelines.



The **European Technical Assessment (ETA)** is an alternative for construction products not covered by a harmonised standard. It is a document providing information on their performance assessment. The procedure is established in the Construction Products Regulation and offers a way for manufacturers to draw up the Declaration of Performance and affix the **CE marking**. It contributes to the free movement of construction products and the creation of a strong Single Market.



**LABC Registered Details** is a fast track approval for products and systems that gives building regulation acceptance by all local authority building control teams in England & Wales – a 'Willy Wonka' golden ticket if you like! This can be for a single product such as a damp-proof course through to a full new offsite modular building. The robust checking process involves consideration of all the technical information, installation and quality control issues together with verification of product testing by notified bodies and test houses throughout Europe such as BBA and BRE. The registration documentation defines the scope of the product or system's use and any limitations that may be relevant to its installation on site.



All local authorities in Scotland accept an **LABSS Registered Detail** as evidence of compliance of the building standards. No further checks, other than local site conditions if appropriate, are made for a product or a design which has been registered with the Scheme. This results in faster responses and faster approvals of building projects. The aim of a Registered Detail is to avoid applicants having to undergo a full building warrant assessment each time the same product/system is to be used in a building project and/or constructed in a different local authority area. That way courtesy of a Registered Detail, Architects and Design Engineers can pass on real savings in time and costs.



Driving rain tests were carried out by BRE to determine the performance of TapcoSlate Classic to wind driven rain. The testing was carried out to the requirements of prEN15601. The main conclusions from these tests were: TapcoSlate Classic when tested at a roof pitch of 14° perform better than the reference products they are compared with; and at a roof pitch of 14° the slates are expected to perform satisfactory under wind driven rain. As the roof pitch increases the weathertightness performance of tiles and slates tends to improve. Therefore, it is expected that TapcoSlate Classic will also perform satisfactorily at pitches steeper than 14°.

### Coverage

PITCH	GAUGE	SLATES M <sup>2</sup>
14° to 25°	6" (152mm)	22
25° to 27.5°	6.5" (165mm)	20
27.5° to 30°	7" (178mm)	19
30° to 90°	7.5" (191mm)	18

### Ratings & Certification

TESTING	FINDINGS	TESTING	FINDINGS
Fire Rating:	BS476 Pt. 3, Boarded Roof SAA/Battened Roof SAC.	Freeze/Thaw Cycle:	No damage or cracking after 300 cycles.
Hail Rating:	Class IV.	Water Absorption:	No appreciable weight gain.
Wind-driven Rain/Uplift:	Miami Dade TAS-100 (110mph) & BRE EN 15601.	Water Permeation:	Impermeable.
Accelerated UV Exposure:	No cracking or splitting.	Temperature Cycling:	No cracking, deformation or expansion.

# Installation Tips

- FIXING GUIDE** ..... A comprehensive Fixing Guide is available for download from our website. The guide covers installation guidelines, materials and tools needed, ventilation requirements, underlay use, ridge and hip fixing, and also covers a few special instructions like fixing to turrets, fixing in extremely windy areas, and removal/replacement of individual slates. The Fixing Guide is always kept up-to-date and relevant, you can download the latest copy from: [www.TapcoRoofingProducts.com/downloads/slate\\_fixing\\_guide.pdf](http://www.TapcoRoofingProducts.com/downloads/slate_fixing_guide.pdf)
- TEMPERATURE** ..... TapcoSlates should be stored in original packaging in a storage facility where the temperature meets or exceeds 7°C. Use protective coverage over all pallets while being temporarily stored on-site. TapcoSlates must be conditioned at a temperature no lower than 7°C for twenty-four (24) hours prior to use. TapcoSlate may be installed at temperatures as low as 0°C but must be hand fastened, the use of a pneumatic gun below 7°C will result in cracking and webbing in the fastened area. Be sure to follow the manufacturer's installation requirements for all underlay or membrane and any other applications. Comply with any and all local building regulations. Note of Caution: The slates can be slippery under certain conditions and job site safety procedures should be enforced.
- ROOF DECK** ..... Required minimum of 0.7" (18mm) OSB for fully-boarded decks, batten size 2" (50mm) by 1" (25mm) treated battens (minimum).
- UNDERLAY** ..... TapcoSlate Classic roofing slates are classed as insufficiently air-open and therefore, following the guidance within BS5250, a **vapour impermeable (HR) roof membrane/underlay** should be used. Tapco Roofing Products recommends Protect Wunderlay for TapcoSlate Classic.
- CHALK LINES** ..... Chalk lines should be snapped horizontally at the exposure line for each row course and vertically on an intermittent basis at the roof tile centreline to ensure that the tiles are straight and uniform. **Do not use red chalk** as this will stain the tiles.
- BENDING & BLENDING** ..... No need to "Bend or Blend" TapcoSlate Classic slates due to the camber of the tile and colour consistency.
- STARTERS/OVERHANG** ..... Starter course should be formulated using cut ¾ TapcoSlate Classic tiles. Slates should overhang into the gutter by 1.5" (38mm). If using dry verge, slates should overhang the roof into the verge by 1.5" to 2" (38mm to 50mm).
- FASTENERS** ..... Slates should be applied using two (2) large 10mm diameter head, galvanised 1.2" (30mm) by 0.1" (2.5mm) steel nails or 1.2" (30mm) by 0.14" (3.5mm) outdoor Phillips bugle screws (using hammer/screwdriver or nail/screw-gun). Corrosion resistant fasteners are always recommended, especially in coastal areas. In Scotland we recommend the use of Stainless Steel nails for fixing. All slates will be attached with two fasteners, as per these instructions. The length of the Hip & Ridge fastener should be a minimum length of 2" (51mm) over the slates and 3" (76mm) over ridge vent. **Do not over-drive the fastener.**
- INSTALLATION** ..... Flatten the camber of the slate to the deck or battens. Install fastener centred within the nail/screw target area. The fastener head should lay on top of the tile in the target area to avoid any lifting. **Do not over-penetrate the fastener.**
- STORAGE** ..... For proper installation, the slates need to be stored on the original pallet on a flat surface. Proper storage of the product at the job site is important. Classic slates are cambered to ensure that maximum pressure is transferred to the leading edge of the slate during installation and should be stacked face down (as originally delivered). **Do not double stack pallets.**
- ACCESSORIES** ..... We have a comprehensive range of roofing accessories available, from roof vents to conservatory ridge and hip pieces, all matched to your TapcoSlate Classic roof colour. For more details, see our website or download our full product brochure here: [www.TapcoRoofingProducts.com/downloads/product\\_brochure.pdf](http://www.TapcoRoofingProducts.com/downloads/product_brochure.pdf)