



# TECHNICAL DATA SHEET

STOCK NO. 4665XXX

July, 2014

## ROYAL ESTATE

This heavyweight, laminated shingle is composed of a dimensionally stable non-woven glass fiber mat, which is thoroughly impregnated with stabilized waterproofing bitumen. Royal Estate is distinguished by a uniquely synchronized manufacturing process which results in distinctly colored shingle tabs. A superior thermally activated shingle sealant helps ensure roof system wind resistance. Colored, ceramic granules surface the top of both layers of this shingle to protect the asphalt from ultraviolet radiation. Each shingle has release tape and mineral powder applied to the underside, thus preventing any sticking in the bundle. Special algae-inhibiting granules have been added to provide long-lasting algae resistance. Suitable for application on roof slopes greater than 4:12. Underlayment is strongly recommended for slopes below 6:12. They may also be applied on low slope roofs (2:12 to 4:12) providing the deck is covered with two plies of felt or one ply of any IKO Ice & Water Protector. This shingle conforms to requirements of CSA A123.5, ASTM D3018, ASTM E108 Class A, ASTM D3462, ASTM D3161 Class F, and ASTM D7158 Class H. IKO's asphalt shingles are produced and designed with consideration for environmental responsibility and sustainability, incorporating quality recycled components whenever possible, manufactured in facilities that comply with the most stringent government environmental regulations, and can therefore be a part of any "green" construction project.

| CHARACTERISTIC             | UNITS                                       | NOMINAL VALUE          | TEST METHOD | STANDARD LIMITS |
|----------------------------|---|------------------------|-------------|-----------------|
| QUANTITY PER PALLET:       | -   | 52                     | -           | N/A             |
| PALLET SIZE:               | cm (in)                                     | 101 x 135<br>(40 x 53) | -           | -               |
| LENGTH:                    | mm (in)                                     | 1016 (40)              | -           | ± 6 (± 1/4)     |
| WIDTH:                     | mm (in)                                     | 337 (13 1/4)           | -           | ± 3 (± 1/8)     |
| HEADLAP:                   | mm (in)                                     | 50 (2)                 | -           | MIN: 50 (2)     |
| BUNDLE QUANTITY:           | -   | 20-22-22               | -           | -               |
| COVERAGE PER BUNDLE:       | ft <sup>2</sup> (m <sup>2</sup> )           | 33.3 (3.1)             | -           | -               |
| EXPOSURE:                  | mm (in)                                     | 143 (5 5/8)            | -           | -               |
| TEAR STRENGTH:             | g   | PASS                   | ASTM D1922  | MIN: 1700       |
| HEAT RESISTANCE:           | -   | PASS                   | *           | 90°C (192°F)    |
| STABILIZED BITUMEN WEIGHT: | g/m <sup>2</sup> (lbs/100 ft <sup>2</sup> ) | PASS                   | ASTM D228   | MIN: 2000 (41)  |
| GRANULE RETENTION:         | %   | PASS                   | ASTM D4977  | MIN: 86         |
| FIRE RATING:               | -   | CLASS A                | ASTM E108   | MIN: CLASS A    |

\* Sample shows no sliding or dripping of the bitumen coating when suspended vertically in an oven at 90°C (192°F) for 2 hours.

See also Material Information Sheet – MIS # 1513, MIS # 1713, MIS # 1813

*The information on this Technical Data sheet is based upon data considered to be true and accurate, based on laboratory tests and production measurements, and is offered solely for the user's consideration, investigation and verification. Nothing contained herein is representative of a warranty or guarantee for which the manufacturer can be held legally responsible. The manufacturer does not assume any responsibility for any misrepresentation or assumptions the reader may formulate.*