

# KingStop<sup>®</sup> 50

# **PVC Waterstops**

# DESCRIPTION

KingStop 50 is extruded from an elastomeric polyvinyl chloride rubber. KingStop 50 are designed in precision engineered profiles to stop any possible from construction, contraction expansion joints in cast-in-place concrete elements. KingStop 50 are produced in two profile ranges; one used for internal fixing and the other for external fixing. Both profiles can used in combination as an integrated system suitable for use in water retaining and water excluding structures. Internal fixing profiles have brass eyelets at 300mm spacing enabling the waterstop to be tied to the support during concreting. reinforcement for External fixing profiles can be fixed by using nails onto the form work or onto the blinding concrete.

#### APPLICATIONS

KingStop 50 is suitable for use in construction, contraction and expansion concrete joints in the following structures:

- Water reservoirs.
- Waste water treatment plants.
- Storage tanks.
- Retaining walls, foundations, basements and suspended slabs.
- Swimming pools.
- Subways, tunnels and culverts.
- Canals, pumping stations and underground chambers.
- Foundations, basements and suspended slabs.

#### ADVANTAGES

- Unique profile design with multiple ribs.
- That has no effect on the quality of potable water.
- Brass eyelets at 30cm spacing for more rigidity while concreting.
- Hollow center bulb for expansion joints to accommodate movement.
- Prefabricated junction pieces.
- Easy to join on site.
- Resistant to wide diluted chemicals including hydrocarbons.

# STANDARDS

KingStop 50 complies with BS 2782, and U. S. Corps of Engineers CRD- C 572-74 for the following properties:

# TECHNICAL PROPERTIES

Colour:	Black & blue
Tensile strength:	≥ 13.0 MPa
Elongation at break:	> 300 %

# METHOD OF INSTALLATION

KingStop 50 fixed inside the shutter should be tied by wire to the reinforcement through the eyelets in the edge flanges. KingStop 50 fixed external should be fixed before concreting with nails to the concrete blinding and vertical shutters through the edge flanges.

# SITE WELDING

The key to a leak free waterstop network is correct on-site jointing. KingStop 50 is made of thermoplastic PVC, and can be easily welded using suitable heating processes, such as welding knife. Cut the edges to be welded in a sharp and straight line then secure the ends in a welding jig. Use the welding knife between the ends, until an even, molten bead appears.

Remove the welding knife and press the ends firmly together. Consult KINGKRETE technical departments for further details.

# **JUNCTION PIECES**

Full range of factory made junction pieces are available for all profiles, for the following:

- Flat and vertical cross.
- Flat and vertical T.
- Corner pieces.
- Flat L.

Other non-standard pieces can be made as may be required by project shop drawings.

# PACKAGING

Internal fixing profiles are supplied in 15, 20 meter rolls. External fixing profiles are supplied in 15, 20 meter rolls.

# STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.



# PROFILES AND DIMENSIONS





AW202/AW252 External fix expansion & construction joints



AW203/AW253 Internal fix construction joints



AW204/AW254 Internal Fix expansion and construction joints

# HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

# NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative. KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

Profile code	Overall width* (mm)	Web thickness (mm)	Center bulb width (mm)	Roll length (m)
AW153	150	2 - 4	-	15, 20
AW154	150	3 - 5	10	15, 20
AW201	200	3 - 5	-	15, 20
AW202	200	3 - 5	16 - 17	15, 20
AW203	200	3 - 5	-	15, 20
AW204	200	3 - 5	12	15, 20
AW251	250	4 - 5	-	15, 20
AW252	250	4 - 5	25	15, 20
AW253	250	3 - 5	-	15, 20
AW254	250	3 - 5	16	15, 20
AW301	300	3 - 5	-	15, 20
AW302	300	3 - 5	25	15, 20

<sup>\*</sup>Variation of ± 4% may occur in the above numbers.

# QUALITY AND CARE

All products originating from KingKrete's Qatar facility are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

® = Registered trademark of the KingKrete-Group in many countries.

# KingKrete-Qatar/KingStop\_50\_02/v2/07\_18

# STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

**NOTE** 

Field service where provided does not constitute supervisory responsibility. Suggestions made by KingKrete Inc. either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not KingKrete Inc. are responsible for carrying out procedures appropriate to a specific application.





<sup>\*\*</sup>Other profiles at different widths can be extruded upon request.

<sup>\*</sup> Properties listed are based on laboratory-controlled tests.