Formally known as X-Seal FR200 PX

NCC X-CALIBUR CONSTRUCTION CHEMISTRY

Technical Data Sheet

X-Seal FR200

Polyurethane jet fuel resistant joint sealant

Product Description

X-Seal FR200 is a high performance fuel resistant sealant for concrete joints subject to attack from fuels, chemicals and biodegradation. Its jet fuel and flame resistance makes it ideal for sealing joints where fuel, oil, hydraulic fluid and skydrol spillage may occur, such as airport fuelling locations, highway fuelling stations, ports and wharfage. It can also be used for wastewater structures, industrial plants, pavements, roads and walkways. It is also available in Pithc Extended Version.

Advantages

- Meets SCAQMD Rule 1168 & LEED VOC Limits
- Formaldehyde free
- Durable resilient seal
- High early movement accommodation
- Excellent application characteristics
- Good fuel and chemical resistance
- Available in gun and pouring grades

Uses

- Movable joints
- Pavement joints subject to fuel spillage
- Floors subject to chemical spillage
- Airport runways and taxiways

Specification Compliance

British Standard 5212:1990 Types N, F & FB.
US Fed Spec SS-S-200E.

USCOE CRD-C 526-92

Movement Accommodation (BS6093)

Butt joints: 25%

Chemical Resistance

X-Seal FR200 is resistant to the spillage of petrol, aviation fuel, diesel fuel, kerosene, lubrication oils, hydraulic fluid, skydrol and white spirit.

Application Properties

Application temperature	0 to 60C
Initial cure	4 hours at 25C
Full cure	3 days at 25C

Volatile Organic Content

VOC = <100g/L

Color

Black.

Guide to Quantities

Joint Size (mm)	Litres per metre run	Metre run per litre
10 x 10	0.10	10.00
13 x 13	0.17	5.92
15 x 15	0.22	4.44
20 x 15	0.30	3.33
20 x 20	0.40	2.50
25 x 20	0.50	2.00
25 x 25	0.62	1.60
30 x 25	0.75	1.33
30 x 30	0.90	1.11

Packaging

4 and 20 Kg.

Shelf Life

12 months when stored below 25C under shade in a dry environment.

Joint Design Considerations

- X-Seal FR200 has a movement accommodation factor (MAF) of 25%. It can be applied in joints of 5mm (3/16") to 50mm (2") wide and 10mm (3/8") to 25mm (1") deep.
- Movement joints should be designed to allow a sealant width to depth ratio of between 1½:1 and 1:1.
- In order to allow movement to be accommodated over the full width of the sealant, it must be debonded.
- Joints in concrete pavements are subject to vehicular traffic. Joint sealants should therefore always be fully supported and the sealant recessed to ensure that, at no time during the movement cycle, will the sealant extrude above the level of the pavement surface.
- For maximum performance, joint edges must be primed with X-Seal FR200 Primer.

Installation Guidelines
NCC X-Calibur provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

Joint Preparation
Joints should be accurately formed. Joint edges must be sound, dry and free from any contaminants. The joint edges must be prepared by grit blasting, grinding or wire brushing to produce a rough clean surface. Care should be taken to ensure that the joint is formed to the required depth, and any expansion joint filler tightly packed in place. For joints in asphalt contact your NCC X-Calibur representative or distributor for advice regarding priming and joint detailing.

Priming
Use X-Seal FR200 Primer. The primer should be applied to the joint sides using a clean, dry paint brush. Work the primer well into the substrate. After application of primer,debond the joint using siliconized debonding tape over the joint filler board. X-Seal FR200 should be applied once the primer is touch dry. The sealant should be applied within 1 to 3 hours after priming. If the primer is left to dry longer than 3 hours, the surfaces must be re-primed prior to applying the sealant.

Mixing
Add the entire contents of Part A (curing agent) to Part B (base component) and mix with an X-Seal mixing paddle using a slow speed drill. Mix for one minute then scrape the sides of the container to ensure all of Part A is re-moved from the sides. Mix for three minutes more to ensure complete mixing. Temperature of the mixed sealant should be between 10C and 40C.

Application
Apply using a sealant gun designed for pouring grade sealants or use direct from the can. The joint sealant should be slightly recessed. Apply within 45 minutes of mixing at 25C.

X-Seal FR200 can be mixed and installed using a low pressure proportioning pump and static mixer. Please contact NCC X-Calibur for details of recommended equipment suppliers.

Cleaning
Clean equipment using X-Shield Solvent S.

Limitations
Do not apply in rain or wet conditions, or at temperatures below 0C.
Do not part mix.
Do not fully immerse the joint sealant until full cure is achieved.

Health and Safety
This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.ncc.com.eg

Authorized Technical Specialist
Please note that only NCC X-Calibur Authorized Technical Support Specialists ('ATSs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.ncc.com.eg for a full list of NCC X-Calibur ATSs.

Datasheet Validity
NCC X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.ncc.com.eg to ensure you have the latest version.

Warranties
NCC X-Calibur supplies products they comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. NCC X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to NCC X-Calibur in writing within five working days of being detected. NCC X-Calibur Construction Chemicals **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** NCC X-Calibur Construction Chemicals shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.