

Single component, medium-modulus, moisture curing polyurethane sealant and adhesive

Description

CIKOjoint plyflex 1200 is a one-component, high solid content, medium-modulus polyurethane sealant and adhesive which cures with moisture, to form a tough & elastic seal applicable at wide range of application temperature.

The product is mainly used for both vertical and horizontal applications. It possesses an excellent adhesion to all types of construction materials such as cement-based material, bricks, ceramic, glass, wood, galvanized and painted sheet iron, aluminium and specific plastics.

Advantages & Properties

- Easy to apply by hand or tooled gun
- No sagging Thixotropic
- Curing rate depends on thickness, no surface tackiness after full cure
- No shrinkage
- Enhanced storage stability
- Cures bubble-free
- Bonds to most construction materials without primer
- Weather and UV resistant
- Watertight
- Paintable with acrylic and emulsion-based paints
- Excellent flexibility and permanent elasticity
- Long lasting weather tight seal
- Excellent workability characteristics
- High mechanical performance

Applicable Standards

CIKOjoint Plyflex 1200 complies with;

- ASTM C920, Type S, Grade NS, use T & NT, Class 25
- BS 6920-1 for the metallic water-soluble impurities and it is suitable for use in drinking and potable water system.
- Meets the French VOC requirements for Class A+

Application Area & Uses

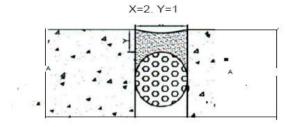
- Expansion joint between many different construction materials.
- Sealing and bonding of Air conditions and ducting system
- Flashing termination and floor joints
- Sealing joints around windows & doors.
- Water structures: Dam, swimming pool, reservoir, etc.
- Sealing concrete control and construction joint.
- Wood, metal aluminium and PVC frames.
- Expansion joints between precast concrete panels.
- Indoor and outdoor applications for pedestrian and vehicular traffic areas.

Application Instructions Surface preparation

All surfaces must be clean, dry and free from oil, grease and all loosely adhering particles. Glass, stainless steel, aluminium and other metals must be degreased with alcohol based or MEK based solvents.

Back Up Material

Use closed cell polyethylene profiles, maintain a straight joint with proper edges that can receive a sealant having width to depth ratio of 2:1 accounting for the thickness of the backing rod



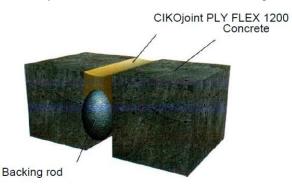
Primer Application

Primer is not required, however for porous surfaces such as concrete and other alkaline surfaces prime using CIKOprimer PU which is a one component polyurethane primer. Apply the primer on the sides of the clean, dry joints using brush. Allow the primer to become tacky (20-30min) before applying joint sealant CIKOjoint Plyflex 1200.



Application & placing of CIKOjoint Plyflex 1200

CIKOjoint Plyflex 1200 is applied direct from the cartridge with a suitable sealant gun or hand tool. Fill the joint using a sealant gun with CIKOjoint Plyflex 1200 and ensure a full contact with the tacky primer on both sides of the joint within its depth. Level the sealant with the adjacent surfaces. Remove the masking tape gently. Surface finishing must be done within maximum 1 hour of application by light and smooth passing over the surface using a foam solution made of liquid soap and water by hand or rubber/wood caulk finishing tool.



Packaging

CIKOjoint Plyflex 1200 is available in 600cc sausages for all available colours.

Storage

Storage should be stored in enclosed cold shaded storage areas at temperatures between +10°C and 25°C away from moisture, sun light and heat.

Shelf life

CIKOjoint Plyflex 1200 has a shelf life of 15 months if unopened and stored in accordance with CIKO storage instructions.

Physical Properties & Chemical Characteristics

Criteria and Test Method	Results and specifications			
Rheology/sagging (ASTM C639)	Thixotropic/no sag and no flow, 0 mm (type II)			
Curing Mechanism	Moisture and humid Curing			
Density (ASTM D1475)	1.2 ± 0.03 g/mL			
Tack free time (23°C & 50% R.H)	20 to 70 minutes			
Curing rate (23°C & 50% R.H)	Approx. 2.5 mm/day			
Solid content (ASTM D2369)	96 ± 4 %			
Permanent Service temperature	-40°C up to 90°C,			
Recommended ambient and substrate temperature during application	10°C up to 45°C			
Heat Aging and weight loss (ASTM C1246)	<2% (No cracking and No chalking)			
Adhesion and cohesion under 25% cyclic movement ASTM C719 (Hockman Cycle)	Pass (No cracking and No adhesive failure)			
Effect of Accelerated weathering (168 hours, 8 hours UV exposure at 70°C and 4 hours condensation at 50°C)	No blistering and No cracking			
Adhesion in Peel to concrete, glass, aluminium and steel (ASTM C794)	≥ 90 N			
Width to depth ratio (W/D)	2:1 for joint having width greater than 10 mm and less than 60 mm			
	1:1 for joints having width between 5 and 10 mm			
Shore A hardness (ASTM D2240)	30-35 @ 7 days 35-40 @ 28 days			
Elongation at break (ASTM D412)	≥700% @ 7 days ≥600% @ 28 days			
Toxicity	Non-toxic, Complies with BS 6920-1			
Colours	White, grey, beige and black			
VOC (USEPA-24)	<100 g/L			
Chemical resistance to occasional spillages to	sewage, sabkha, mineral and mild acids, hydroxides and alkalis			



Coverage & Consumption:

600 ML/CC sausage of CIKOjoint Plyflex 1200 provides the below theoretical coverage in linear meter:

Application Width	15 mm	20 mm	25 mm	30mm	35mm
Application Depth	8 mm	10 mm	12 mm	15 mm	15 mm
Coverage (linear meter)	5 L.m	3 L.m	2 L.m	1.3 L.m	1.1 L.m

Precautions

- Do not use over damp surface or standing water.
- Avoid application temperature below 5°C and above 45°C.
- Avoid applying over surfaces having temperatures greater than 45°C.

Health & safety

CIKOjoint Plyflex 1200 should not come in contact with eyes or to be swallowed. Ensure adequate ventilation and avoid inhalation of vapours.

Applicator should wear suitable cloths, gloves and goggles. Use barrier creams recommended providing additional skin protection. If comes in contact with eyes flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

Technical Support

For further technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and offsite services to end users, specifier and contractors.

More from CIKO Middle East

A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp-proof coatings
- > Surface treatments
- Flooring and toppings
- Grouts and anchors
- > Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries

Legal Notice and Warranty

CIKO warrants this product to be free from manufacturing defects and to meet the technical properties stated in the current Technical Data Sheet, if used as directed within its shelf life. Satisfactory results depend not only on quality of product but also on many factors beyond our control. CIKO makes no other warranty or guarantee, express or implied, including warranties of merchantability or fitness for a particular purpose with respect to its product. The sole and exclusive remedy of purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the sole option of CIKO. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by purchaser. CIKO will not be responsible for any special incidental, consequential including lost profits or punitive damages of any kind. Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on CIKO's present knowledge and experience. However, CIKO assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. CIKO reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.



