

SILICA FLEX HD100



SILICA FLEX HD100 is a Cross linked Closed cell Polymer and widely known as **pre- moulded** compressible Expansion Joint Filler Board. Being flexible & high compression- recovery **SILICA FLEX HD100** is suitable for places where readily compressible low load transfer joint filler is required. Its excellent recovery property makes it the most suitable product for this application **SILICA FLEX HD100** is non bituminous and very light in weight, this makes it very easy to handle and install. Being polymer based, it is rot proof and bacteria resistant.

FEATURES AND BENEFITS:

- Compression and recovery – On compression up to 50% of its actual thickness, provide excellent recovery of 95% to its original.
- Bitumen free – Being Bitumen free its is Non- staining and non oozing material, which make **SILICA FLEX HD100** clean and hygienic solution at time of application.
- Flexible - Handles corners and radius applications easily. Thermally stable (from - 40 °C to + 70 °C)
- Cost Effective – **SILICA FLEX HD100** sheets can be cut in any size and design with a normal knife or a hexa blade at application area with almost negligible wastage as compared to traditional solutions.
- Polymeric- **SILICA FLEX HD100** is polymeric by nature hence it is rot proof, doesn't deteriorate also over a longer period.
- Closed cell - Extremely low water absorption thus non- deteriorating and durable. Resilient and does not distort under normal load from wet concrete.
- Chemically Resistant- Inert to most dilute acids, resistant to oil and hydrocarbons.

SPECS:

S. No. Hd100	Parameters	Units	SILICA FLEX
1.	Density	Kg/M.Cu	90 ± 10%
2.	Water Absorption	Kg/Mt.Sq of Cut Surface Area	0.090 Max
3.	Compression Deflection & Recovery, % without weathering	%	90% Min
4.	Compression Deflection & Recovery, % with weathering	%	90% Min
5.	Extrusion	MM	4 MM Max.
6.	Alkali Resistance		Not Effect Observed
7.	Weathering Test		No Disintegration

USE / APPLICATIONS:

SILICA FLEX HD100 is suitable for use with a wide variety of concrete construction projects. It is also ideal for many sizes of concrete slab work, as well as other flatwork applications.

- Structural expansion joint filler for concrete brick and block work in concrete highways, airport runways parking areas, industrial flooring & taxi tracks etc.
- Creating Structural expansion joint in concrete Column and beams of building.
- Creating Isolation Joint in Machine Foundation at Factories.
- Isolation to infill panels
- Sidewalks
- Driveways
- Patios
- Airport runways
- Warehouse flooring
- Curbs

Application:

- Structural expansion joint filler for concrete brick and block work in concrete highways, airport runways parking areas, industrial flooring & taxi tracks etc.
- Isolation to infill panels
- Bridge decks, abutments, pier hinge joints etc.
- As a backup support for sealant
- Expansion joints in concrete highways, airport runways, taxi tracks etc.
- Expansion joints in parking areas, industrial flooring etc.
- Water retaining and water excluding structures

Laying Procedure – While creating expansion joint **SILICA FLEX HD100** will become one side of shuttering. To hold two free sides of shuttering a MS bolt of 12 MM Dia with both sides threaded will be used at every 1 Mt interval with matching nuts with concrete sleeve 50 MM x 50 MM. This bolt will taken out & hole of sleeve is to be grouted afterwards with cement mortar. In an expansion \ movement joint **SILICA FLEX HD100** is to be fixed in position to substrate using double sided adhesive.

When forming expansion joint with **SILICA FLEX HD100** in in-situ concrete, joint sealing slots is to be formed in the following manner.

- **SILICA FLEX HD100** is to become one side of shuttering. Cut off a strip of **SILICA FLEX HD100** equal to D. Further; cut the strip along the joint length into two.
- The depth of top strip should be = $(1.25 W \text{ or } W + 5\text{mm whichever is less}) + (W/2 \text{ or } 15\text{mm whichever is less})$ and the bottom strip = $(D - \text{top strip})$ where
D = slot depth in MM W = slot width in MM

Pin the top strip back on to the bottom strip using nails at two-inch intervals. Ensure that the slot is clean and dry Install a strip of filler material on top of **SILICA FLEX HD100** flush with finished surface either by synthetic rubber based adhesive or by regular means.

- Just prior to Sealing pull off the top strip to create an uncontaminated sealing slots ready for preparation & sealing.
- Install **SILICAROD** 30 MM Diameter (25% larger than the joint width or $W + 5 \text{ MM}$ whichever is less) in the joint & finish with sealant on the top.



P.D. Projects (An ISO 9001 : 2015 Certified Co.)

(Unit of Silica Group)

201B, Vardhman Dimension Plaza, Inder Enclave, Pachim Vihar, Delhi-110087

Cont. No.: +91 11 4163 0699 / 95 9931 2061

info@silicagroup.co.in

www.silicagroup.co.in