

FAVIM FVM-100 Full Area Shock and Vibration Isolation Material



Full area vibration damping and sound deadening materials for foundations, plinths and floating floors can be applied to either a concrete base or consolidated hardcore

Applications include: Machinery, HVAC, lifts and elevators, workshops, pumps, compressors and generators, industrial storage and working areas, expansion joints, helicopter pads. Ideally suited for **medium pressure** applications.

Construction: Recycled rubber particles with a polyurethane PUR binder.

Properties: Mildew and moisture proof
 Permanently elastic / Low long term creep
 Temperature range °C: -30 to +110
 Density: 550 kg/m³

Building materials class: B2

Standard Sheet: 1.25m x 1.0m, 1.0m x 1.0m, 1.0m x 0.5m.
 Other sizes, pads and strips available on request.

Favim can be applied either direct to a consolidated hardcore base or a reinforced concrete pit base depending upon the site conditions

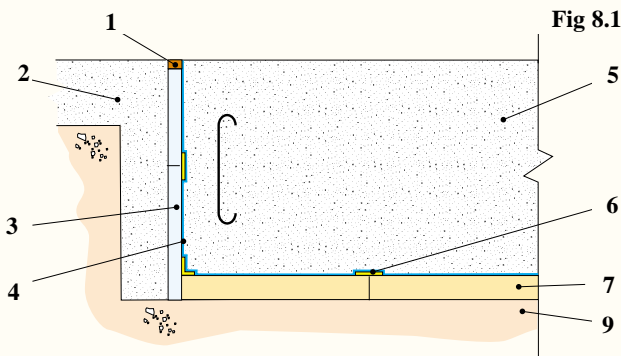


Fig 8.1

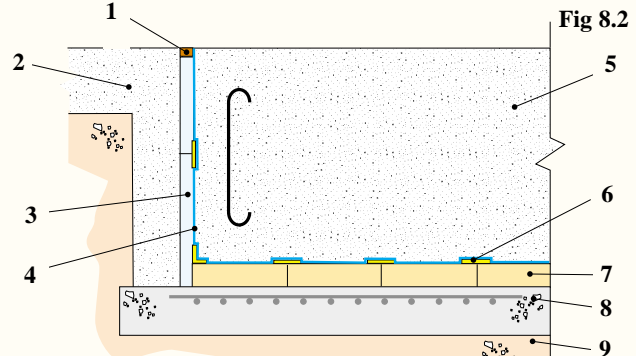


Fig 8.2

Description of Diagram

- 1) Polymeric sealant or sealing strip (Not supplied by Farrat).
- 2) Reinforced impermeable concrete to sides and base of pit. (Fig 8.2) Thickness and concrete specification to be determined by ground and loading conditions.*
- 3) Farrat LVI or ISF side wall vibration isolation material, spot bonded to pit walls using WB Adhesive.
- 4) Damp proof membrane DPM. Minimum 1000gsm.
- 5) Steel cage reinforced concrete foundation block designed to support imposed dynamic and static loads and suitable for elastic support.*
- 6) JLT Joint line tape to all joints.
- 7) Favim 100 full area vibration isolation material to the pit base.
- 8) Reinforced concrete pit base.* (Fig 8.2)
- 9) Consolidated hardcore base.

Favim 100 Full area vibration isolation material							
Performance table to be used as a guide only.							
Product	Favim	FVM	100-12	FVM	100-25	FVM	100-50
Static Loading Pressure SLP kPa	Dynamic Comp. Modulus Edc MPa	Static Deflection δ mm	Dynamic Vert. Nat. Frequency fvd Hz	Static Deflection δ mm	Dynamic Vert. Nat. Frequency fvd Hz	Static Deflection δ mm	Dynamic Vert. Nat. Frequency fvd Hz
25	2.57	0.2	43	0.5	30	0.9	22
30	2.63	0.3	41	0.7	29	1.3	20
40	2.63	0.5	37	1.1	26	2.2	19
50	2.64	0.8	31	1.5	22	3.0	16
60	2.65	1.0	29	2.0	20	4.1	14
70	2.65	1.3	27	2.5	19	5.1	13
75	2.65	1.4	26	2.8	18	5.6	13
80	2.70	1.6	25	3.1	18	6.2	12
90	2.70	1.9	24	3.7	17	7.5	12
100	2.71	2.2	23	4.4	16	8.7	11

Dynamic vertical natural frequency	<i>fvd</i>	Hz	= (1/(N) ^{0.5})* <i>fvd</i> (for one layer)
Static deflection	<i>δ</i>	mm	= N x deflection for one layer
Specific spring constant	<i>Kss</i>	N/mm/mm ²	= <i>Kss</i> (for one layer)/N
Spring constant	<i>K</i>	N/mm	= Area mm ² * <i>Kss</i>
Vertical natural frequency	<i>fvd</i>	Hz	= 15.76*(1/d) ^{0.5}
Number of layers	<i>N</i>		

* Reinforced concrete foundation blocks and associated structures to be designed by qualified consulting engineers and constructed by contractors of proven ability and experience.

Product	Thickness mm
FVM 100-12	12.5
FVM 100-25	25
FVM 100-50	50

Other thicknesses available on request.