

Floating Floor Mount Type PFFM

Jacking Steel Housing, With Accessible Element

APPLICATION

The PFFM mount is used where an integral jacking mount system is required for support and acoustical isolation of floating concrete floors. It offers a highly effective noise attenuation system by providing an acoustical decoupling of the floating floor from the major structural elements of the building. Typically used for high noise sources such as plant rooms in multi-storey buildings and critical applications such as theatres, hospitals and sound studios.

FEATURES

- Removable cover plate gives complete access to the active element when installed
- Capable of jacking the floating floor from zero elevation up to a maximum of 120mm air gap (lift height)
- Load capacities up to 800kg/mount
- Rated static deflection up to 10mm
- Fully galvanised steel construction
- Cage height can be customised to exactly match the floating floor thickness – no extension collars are necessary. Support lugs to locate the steel reinforcement and aid load transfer are positioned to suit the specific reinforcing bar layout

OPTIONS

- Includes option for seismic restraint of the floor

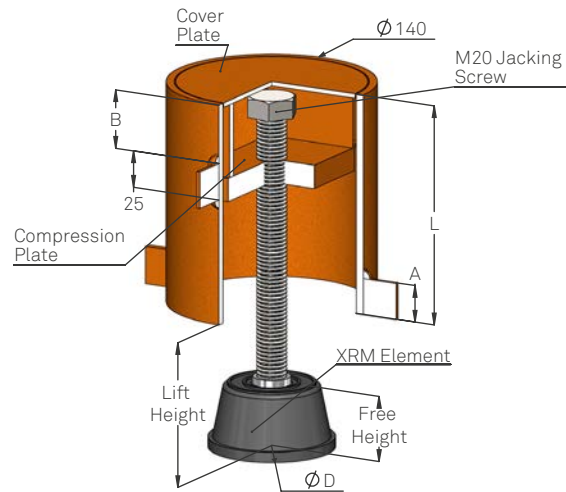
DESIGN

The PFFM housing is embedded in the floating concrete floor as it is cast, with the steel reinforcement positioned on the upper and lower support lugs. Location of the upper lugs can be arranged to suit specific reinforcement layout and to facilitate installation. The ability to match housing height exactly to floor thickness provides a ready and useful screed level for the concrete. The cover plate should be sealed with silicone sealant on completion of construction. Most floor coverings, including tiles, can be installed directly over the PFFM unit.

HOUSING HEIGHT / LIFT HEIGHT

For slab thicknesses less than 130mm, preliminary jacking of the slab is required before the XRMA/XRMB element can be installed. The minimum lift height shown represents the height above the structural floor which must be reached before the element can be fitted.

The maximum lift height applies to the standard housing with 100mm long jacking screw and for the floating floor cast directly onto the structural slab. If lift heights greater than those shown (up to a maximum of 120mm) are needed, details must be supplied so that adjustments to the housing can be made at time of manufacture. In such cases, the minimum lift height is maximum lift height minus 64mm.



PFFM DIMENSIONS

PFFM PRODUCT GUIDE

Type	Max Load kg	Static Deflection mm	Colour Code	Height mm	Diameter mm
XRMA-2	170	10	Yellow	73	85
XRMA-3	240		Red		
XRMA-4	340		Green		
XRMA-5	500		Grey		
XRMB-2	325	10	White	76	96
XRMB-3	425		Red		
XRMB-4	600		Green		
XRMB-5	800		Grey		

PFFM Dimensions

Type	HOUSING			LIFT HEIGHT	
	L mm	A mm	B mm	Min mm	Max mm
PFFM	75 (min)	15	30	56	120
	100	20	35	31	95
	125	25	40	6	70
	150	25	40	-	64
	175	25	40	-	64
	200	25	50	-	64
	>200	25	50	-	64

Note

1. Length L must be selected to match slab thickness.
2. Unless otherwise specified, these dimensions will be used.
3. A maximum lift height of 120mm can be achieved for any housing height L.

MOUNT SELECTION

Due to the complexity of mount layouts, Embelton invites submission of proposed slab designs for comments and verification, along with details of loading and equipment locations if applicable.

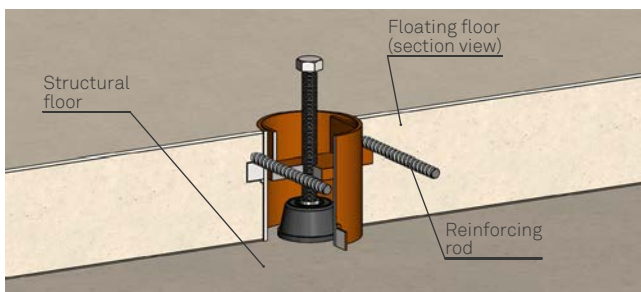
ELEMENT CHARACTERISTICS

Rubber Element

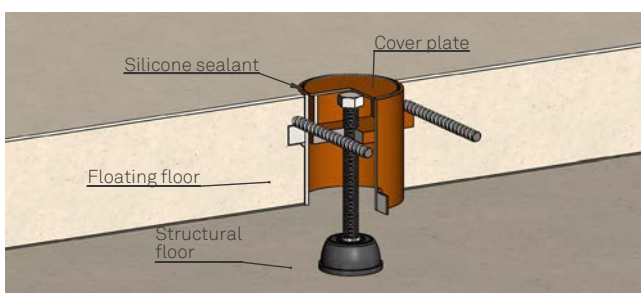
The active rubber element is manufactured from a high quality natural rubber blend giving excellent dynamic performance and low long term creep. All compounds used are tested to ASTM D2000 for original physical properties, ageing and compression set. A thick steel plate is integrally moulded into the top of the element with a removable loading button to locate the jacking screw.

Spring Element

Where high static deflections (and therefore lower system natural frequencies) are required, the PFFM mount can accept a spring as the resilient element in place of rubber; however the lift heights shown will alter. Please contact Embelton direct for altered required alterations.



PFFM JACK-UP FLOATING FLOOR LOWERED



PFFM JACK-UP FLOATING FLOOR RAISED

INSTALLATION

Installation procedures will depend upon the thickness of the floor slab. Generally the top of the PFFM housing can be used as a screeding level for the floor, with external positioning lugs used to locate the reinforcing steel.

Prior to pouring the concrete, it is necessary to ensure that the top and bottom of the housing are effectively sealed to prevent ingress of any slurry entering the mount cavity so that correct seating of the element and cover plate are not affected.

Once the floor is jacked and leveled with all elements loaded correctly, the cover plate should be sealed in place with silicone sealant.

JACKING PROCEDURE

Full jacking instructions, including the recommended jacking sequence, are prepared specifically for each project where requested.

For floors of 75mm to 120mm thick, jacking must be done without the rubber element. Usually a 6-8mm rubber washer with steel compression plate is used in place of the element to jack the floor incrementally until the minimum lift height is reached, where upon the element can be inserted.

Please note: Jacking is usually done one screw turn at a time on all housings in rotation to minimise slab distortion and screw loads. Lubrication of the jacking screw is mandatory.

TECHNICAL ASSISTANCE

All Embelton offices can provide detailed technical assistance on the use of this product in specific applications.

CONDITIONS OF SALE

These products are sold subject to the published Embelton General Conditions of Sale, copies of which may be inspected on request.

SPECIFICATION

Mounts for the floating floor slabs shall comprise a galvanised steel housing with removable cover plate for complete access to the active element, and a rubber element moulded from prime materials and capable of 10mm static deflection at rated load. The mounts shall be able to lift the floor from zero elevation to design operating height, shall be of one piece construction to suit floor thickness without height extension collars and must have the facility to position and support reinforcing steel consistent with structural requirements. They will be type PFFM as supplied by Embelton.