Rubber Design
vibration and noise control

DOCUMENTATION SHEET

Steel Spring Isolators
Installation instruction SO4

INSTALLATION INSTRUCTION

1. General

Static deflection
The installation deflection of the steel spring isolator is a result of loading the spring with the weight of the installation. If the installation is lowered onto the steel spring isolator, the steel springs (inside the steel spring isolator) will compress under the static load acting on the steel spring isolator. This static deflection can vary per steel spring isolator and can be calculated by dividing the static load per steel spring isolator by the spring stiffness Cz.

Nominal working height
The nominal working height is the height of the steel spring isolator when adjusted and levelled to provide the best performance of the steel spring isolator.

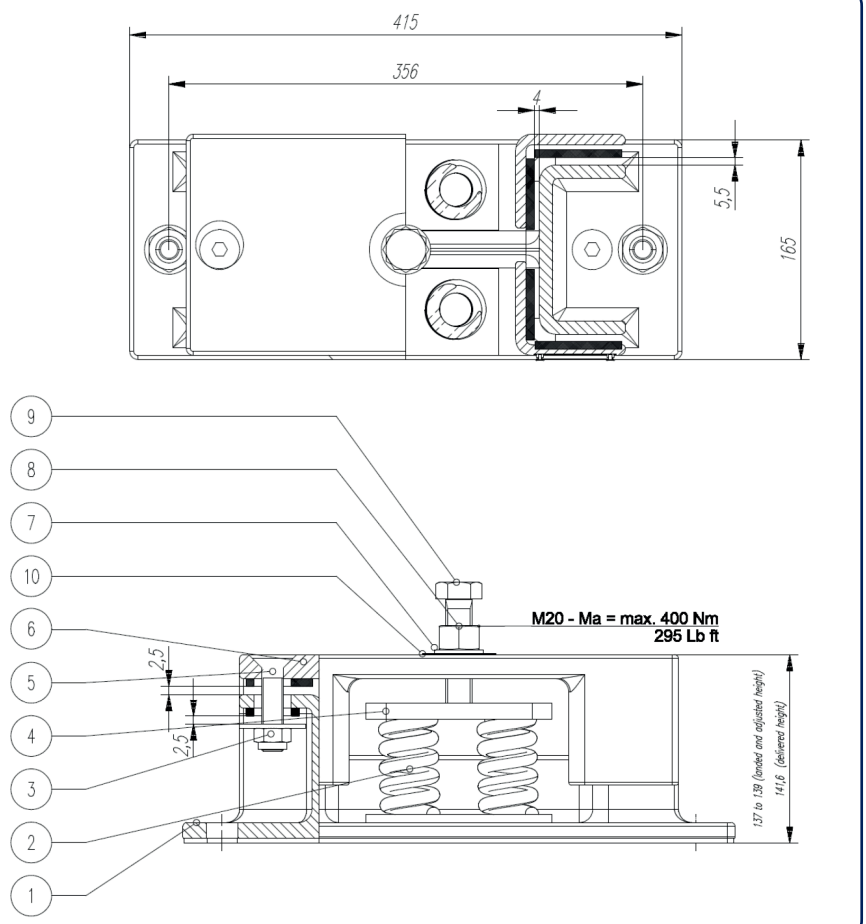
Aligning of the pressure plate
Before you begin installing the seismic mount check if the blue/black dot on the pressure plate is aligned with the M20 hole. It's possible that the pressure plate moved during transportation, if so align the dot on the pressure plate with the M20 hole using a nylon hammer.

Maintenance
A correctly dimensioned and correctly installed Seismic Open isolator does not require any maintenance. But if some dirt in the springs is noticed it is advised to clean this.

2. Components

The seismic open steel spring isolator TRS1SO4_A00 consist of the following components:

1. Base casting assembly
2. Steel springs
3. Vertical restraining locking nut
4. Pressure plate
5. Vertical restraining countersink bolt
6. Top casting assembly
7. M20 Washer
8. M20 Nut
9. M20-8.8 Leveling screw with spherical machined end
10. Friction shim

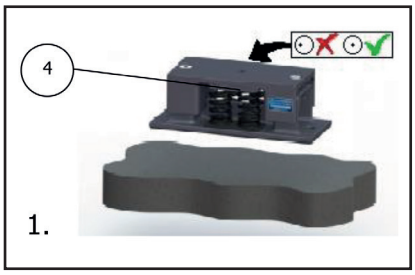


COMPONENTS

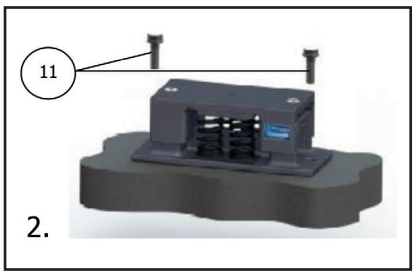
INSTALLATION INSTRUCTION

3. Installation

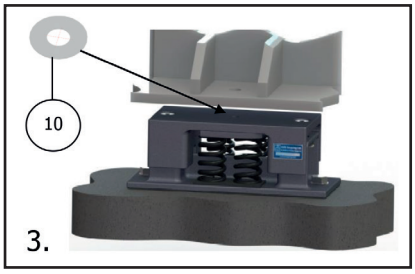
1. Align the Seismic Open isolators on the foundation floor. Before continuing check if the blue or black dot on the pressure plate (4) is aligned with the M20 hole.
   The contact area of the base frame should be clean and smooth. Paint, corrosion etc. should be removed. This is necessary for the correct working of the friction shim. Please check this and clean if needed.



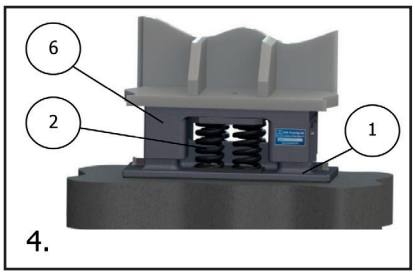
2. Fixate the Seismic Open isolator to the foundation using an adequate connection. The advice is to use M20 bolts (11).



3. Place the friction shim (10) on the top casting. Make sure the contact surfaces are clean and paint free. Lower the installation on the Seismic Open isolator. Ensure that the hole of the base frame is in line with the M20 threaded hole of the top casting. Be careful not to slide the base frame over the top casting. This could damage the friction shim.

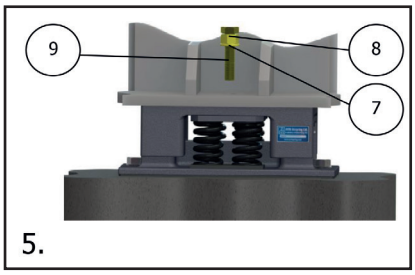


4. With the full static load of the installation acting upon the Seismic Open isolator, the steel springs (2) will compress and the top casting (6) makes contact with the base casting (1).

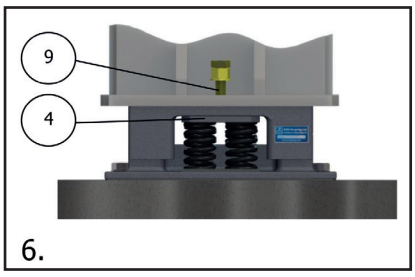


3. Installation

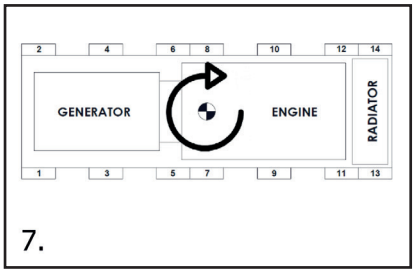
5. Fit in the M20 levelling bolt with machined spherical end (9). Make sure that the washer (7) and nut (8) are included.



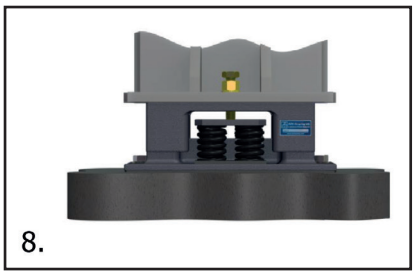
6. After 7-8 turns the M20 levelling bolt (9) will make contact with the pressure plate (4). When turning the levelling bolt further it compresses the steel springs.



7. The load should be applied gradually onto each individual Seismic Open isolator and it is advisable to do this in steps of one (1) turn at the time. Until the height is 138 mm (+/- 1) is reached.
   The distance between the top and the base should be 2.5 mm, in both directions.
   See the drawing on page 4 for dimensions.



8. Fix the installation to the Seismic Open isolator by use of the M20 nut. We recommend to use a torque wrench. The maximum tightening torque is 400 Nm or 295 foot pounds.



Rubber Design B.V.
Industrieweg 21
2995 BE Heerjansdam
The Netherlands
Phone: +31 (0)78 677 87 78
Fax: +31 (0)78 677 10 38
Email: info@rubberdesign.nl
Web: www.rubberdesign.nl