

HSW-UK  
Substructures

DORMA



# DORMA HSW-UK substructure

## Unique solutions straight off the shelf!

DORMA HSW glass partitions, our horizontal sliding walls, can be tailored to suit any shop frontage. Whether the layout is straight, angled or curved, the DORMA HSW adapts to the specific spatial conditions and requirements of the customer. Unique solutions straight off the shelf!

Matching the simplicity and flexibility of the DORMA HSW in terms of its make-up and configurability, the DORMA HSW-UK substructure is likewise remarkably easy to accommodate and install. Made from aluminium – much lighter in weight than steel and with some highly beneficial chemical properties – it is the ideal material for the DORMA HSW system.

With the various elements of the substructure prefabricated by DORMA according to the measurements taken on site, installation can be carried out quickly and fuss-free – without any need for preparation or reworking of the aluminium profile by the metal erectors. The advantages of the DORMA HSW-UK substructure over the conventional steel alternative can be summarised as follows:

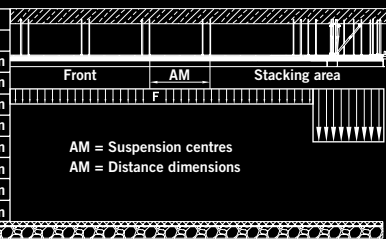
### A comparison:

	Self-made substructure	DORMA HSW-UK
Prior to installation	1. Site visit to take the measurements for the substructure	X
	2. Complex calculation and design of the substructure taking into account the structural loads	Design of the HSW-UK substructure is both quick and easy using previously prepared DORMA diagrams
	3. Static analysis to determine the number of suspension points and bracing elements	Not applicable
	4. Determination of the partition configuration and also the position and type of suspension and bracing elements necessary, taking into account already installed air-conditioning shafts, air curtain systems and cable ducts	The configuration and suspension points can be defined on site. Obstacles can be flexibly accommodated as installation progresses, i.e. without prior planning!
	5. Extensive material management and fabrication requirements	Simplified material management requirements
	6. Welding of the substructure assembly ready for track fixing	Not applicable
	7. Fabrication of the planned suspension assemblies and welding to the substructure profile	Not applicable
	8. Final corrosion protection treatment	Not applicable
Installation on site	9. Fixing of the substructure with suspension assemblies and bracing elements to the overhead structure. In the event of unforeseen obstacles (e.g. air-conditioning shafts), suspension assemblies and bracing elements will need to be repositioned; repeat steps 7 and 8!	See point 4
	10. Transfer of drill hole pattern to the substructure in accordance with DORMA track layout and parking/stacking arrangement. Drilling of the substructure profile.	Not applicable
	11. Bolting of the track profile to the substructure	X
	12. Cleaning of the internal track surfaces within the track profile to remove drilling swarf	Not applicable
	13. Hanging and aligning of the HSW panels	X

The supported load can be determined quickly and without any complicated analysis work, on the basis of the table provided by DORMA (see graphic).

AM max.		Front	AM	Stacking area
F	AM			
60kg/m	2050mm			
75kg/m	1900mm			
90kg/m	1750mm			
105kg/m	1750mm			
120kg/m	1600mm			
135kg/m	1600mm			
150kg/m	1450mm			
160kg/m	1450mm			

AM = Suspension centres  
AM = Distance dimensions



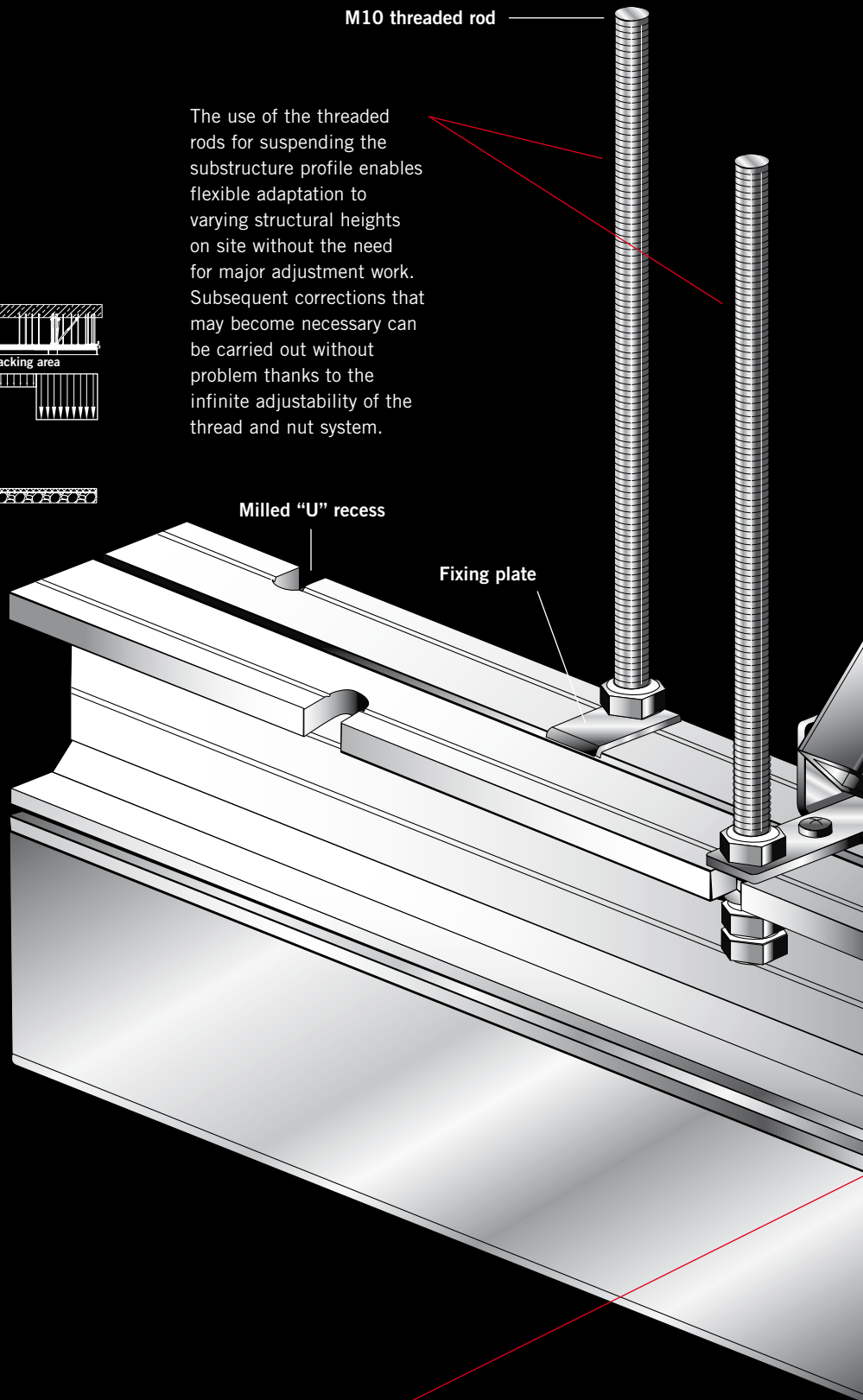
The substructure profile suspended from threaded rods offers maximum flexibility. The fact that the threaded rods can be located at any point on the profile means that the system can be adapted to any structural situation. Existing installations serving the building can thus be readily accommodated without causing a major obstruction.

M10 threaded rod

The use of the threaded rods for suspending the substructure profile enables flexible adaptation to varying structural heights on site without the need for major adjustment work. Subsequent corrections that may become necessary can be carried out without problem thanks to the infinite adjustability of the thread and nut system.

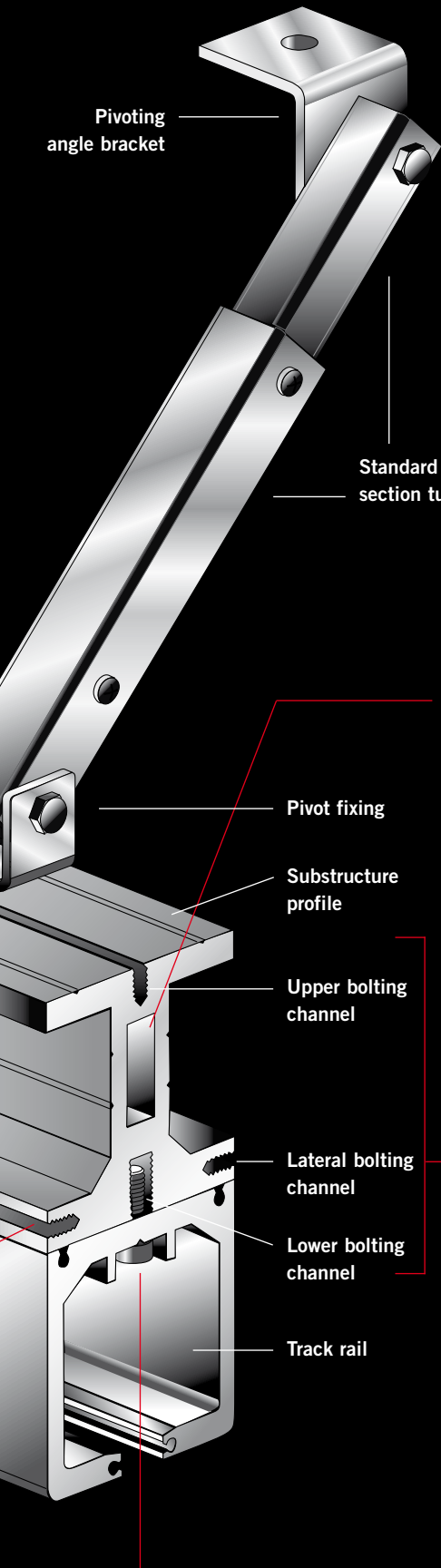
Milled "U" recess

Fixing plate



The bolting channels on either side of the substructure profile can be used in a variety of ways – e.g. for fixing retaining brackets for ceiling suspension elements or for other non-system attachments.

Pre-drilling and thread tapping are no longer necessary. The track profile can be attached directly using the bottom bolting channel.



Pivoting angle bracket

Standard square section tubes

Pivot fixing

Substructure profile

Upper bolting channel

Lateral bolting channel

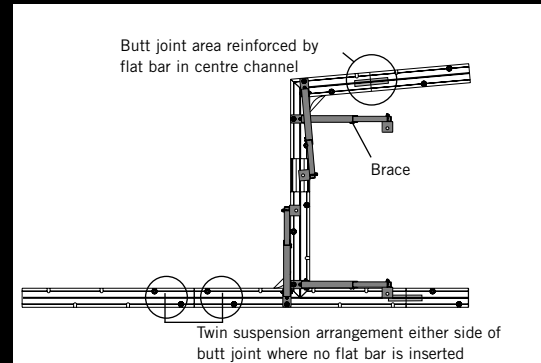
Lower bolting channel

Track rail

**Centre channel**

A span of up to 2.1 m between two suspension points is possible because the profile can be additionally stiffened by inserting a standardised flat bar in the centre channel. This technique is especially useful for bridging the butt joints.

The various bolting channels extending over the full length of the substructure profile mean that screw fasteners and bolts can be readily located at any position.

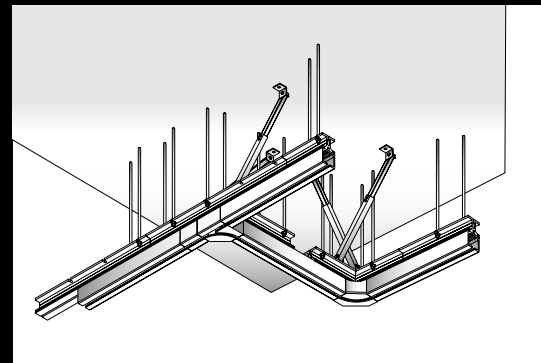


Butt joint area reinforced by flat bar in centre channel

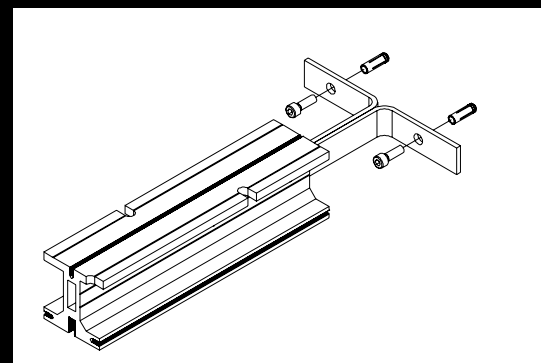
Brace

Twin suspension arrangement either side of butt joint where no flat bar is inserted

A twin suspension arrangement in the area of the butt joint can be avoided when using two aluminium connectors in the centre channel.



The advantages of this coordinated system really come to the fore when constructing a stacking track using the modules of the DORMA HSW-UK substructure and the track profile. Provided that the track profile is properly bolted to the UK substructure, the latter can be interrupted by distances of up to 40 cm measured from suspension rod to suspension rod.



In order to avoid vibration, two aluminium straps can be inserted into the centre channel and angled for fixing to the masonry in the area of the wall abutment.

## The systematic approach

As a modular-designed substructure system, the DORMA HSW-UK cannot fail to impress!

In particular, it offers easy adaptability and installation on site.

As a high-quality, load-bearing and light-weight aluminium component, the HSW-UK also offers increased service life coupled with a significant reduction in the amount of preparatory work required.

The geometry of the DORMA substructure profile with its high section modulus and rigidity reduces the number of suspension points required.

Major instances of building settlement can also be compensated for by subsequently adjusting the threaded rods installed as the suspension devices.

## The formula for success

See for yourselves. Send us your practical examples and we will be glad to calculate for you the potential savings

that can accrue when using DORMA HSW-UK substructures. Or you can work it out for yourselves:

## Metre price plus stacking track\*

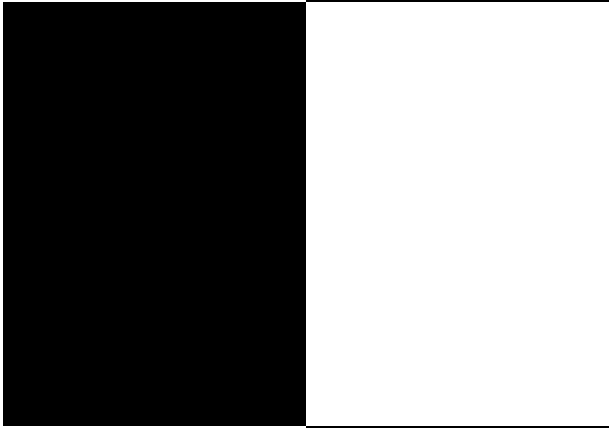
\* For current prices, please consult the latest price list.

Using this rule of thumb, you can quickly and simply calculate the costs for your project.

Special layouts can also be implemented problem-free and without undue expense!

Give us a call and let's have a chat.

## It's that simple!



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