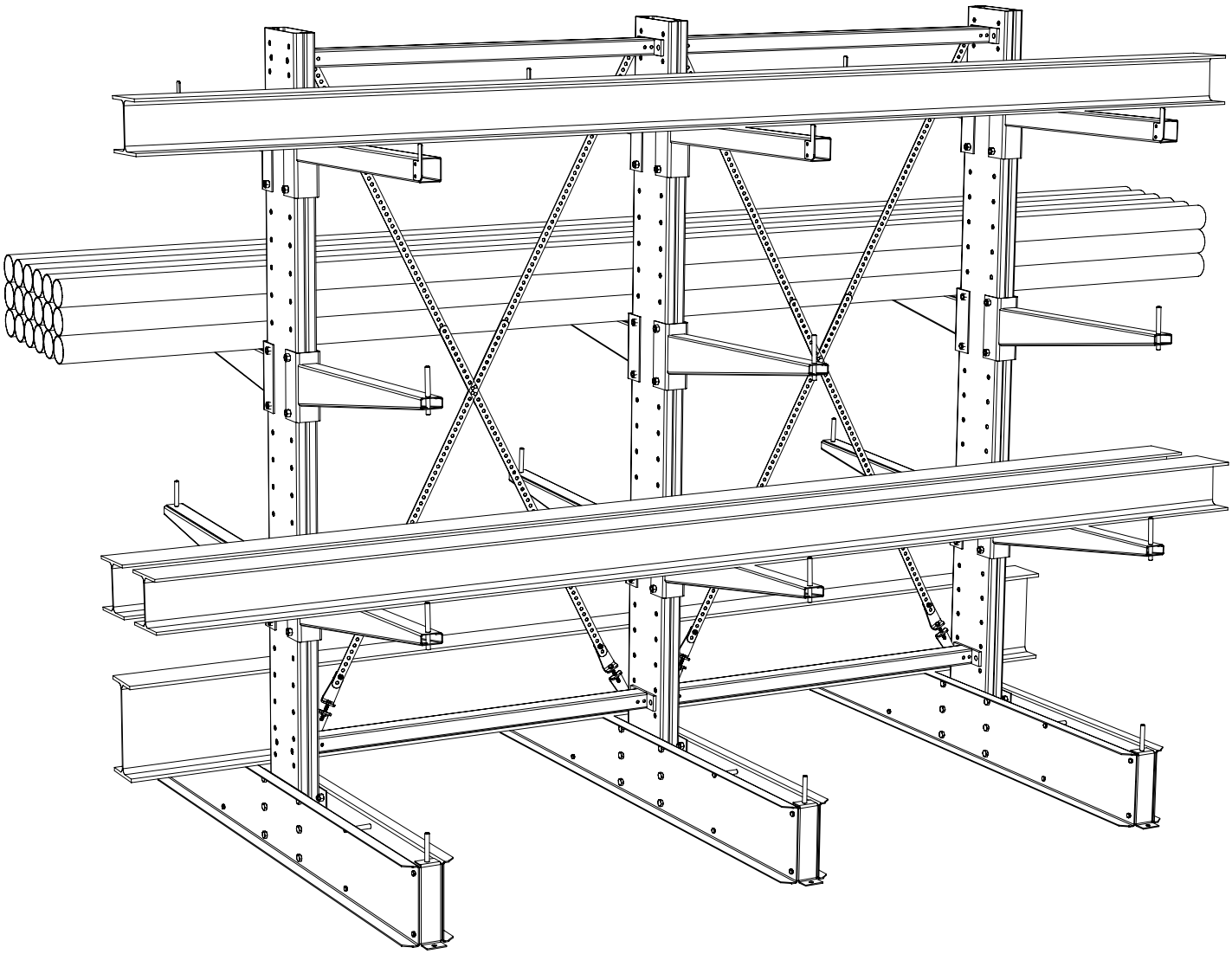
Assembly and users manual

Cantilever racking Heavy-duty model



EAB

Assembling tools
16 mm Hex socket
17 mm Hex socket
18 mm Hex socket
19 mm Hex socket
10 mm Concrete drill bit
12 mm Concrete drill bit
Driver/Impact wrench
Level alt. Laserliner
Rotary Hammer alt. Hammer-drill
Hammer

Concrete floor
The concrete grade shall be minimum C 25/30
Construction joints must not pass through the rack, because a movement in the joint can cause unpredictable forces in the rack. Construction joints shall be placed between the racks.

Purchaser/User is responsible that the floor is designed for the actual loads.
EAB can by request provide information about floor loads from the rack.

Maximum height tolerances

Measure	Measure length	Tolerance
Flatness	0,25 m	± 1,2 mm
Flatness	2,0 m	± 5 mm
Inclination	1/600	

All points, regarding both flatness and slope, shall be within ±20 mm of the horizontal datum.

Tightening Torque

Screw M10 8.8	Max. tightening torque 47 Nm
Screw M12 8.8	Max. tightening torque 81 Nm
Screw M16 8.8	Max. tightening torque 197 Nm

Lock nut M10 class 8
Tighten screw joints for good contact.
Max. tightening torque must not be exceeded.

Expansion anchors
M10x90 Hilti HST
Drill hole Ø10 - 80 mm
Min. mounting depth 69 mm
Max. thickness fastened 10 mm

M12x100 Hilti HSA
Drill hole Ø12 - 95 mm
Min. mounting depth 65 mm
Max. thickness fastened 20 mm

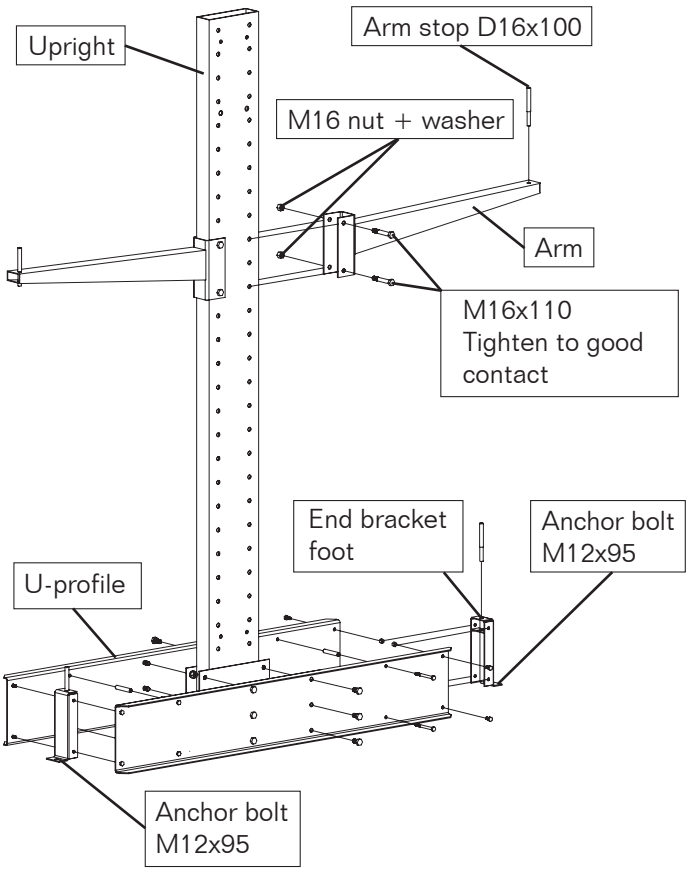
See Hiltis instructions on the package.
If the distance between the anchor and the concrete edge is less than 9x anchor diameter, please contact EAB.

Asphalt
Btg screw and adhesive primer EP must be used when mounting on asphalt. Before use for primer EP, read instructions for use and safety instructions on the packaging. For complete product data, see www.hagmans.se. Fill boreholes with primer EP, let the glue sink and refill. Mount with the screw.

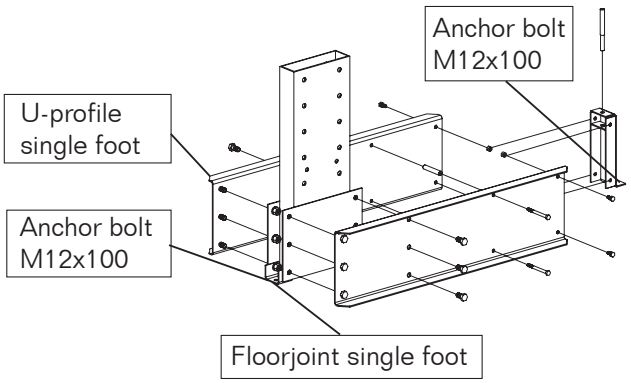
Hilti HUS3-H 8x65
BoreholeØ 8-70
My. Mounting depth 50 mm
Max. Mounting thickness 15 mm
The screw must be tightened to a good contact.

Hilti HUS3-H 10x70
Borehole Ø 10-75
My. Mounting depth 55 mm
Max. Mounting thickness 15 mm
The screw must be tightened to a good contact.

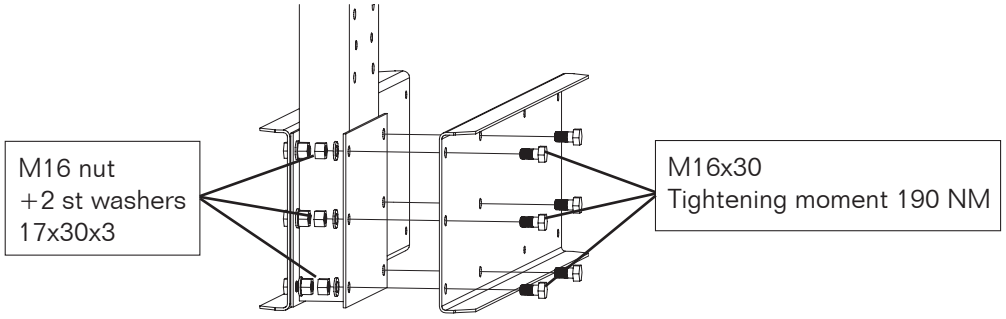
PELARE MED DUBBELFOT

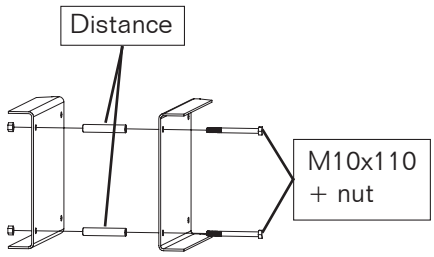


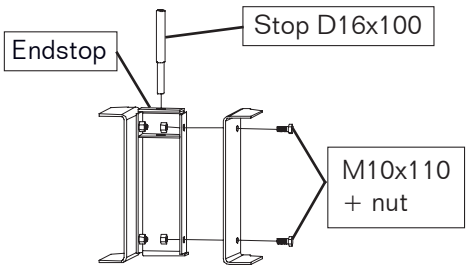
PELARE MED ENKELFOT



SINGLE FOOT



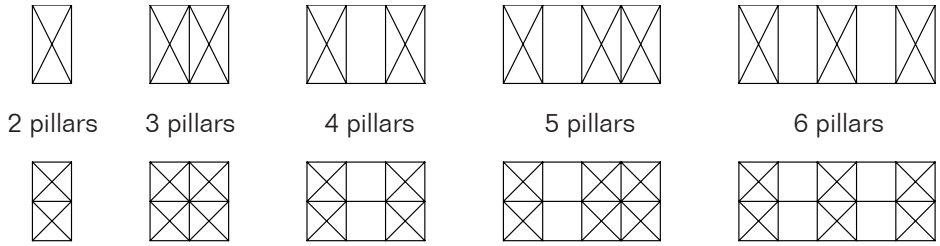




BRACING

$$\text{The number of sections with cross braces} = \frac{\text{number of uprights}}{2} \text{ round up}$$

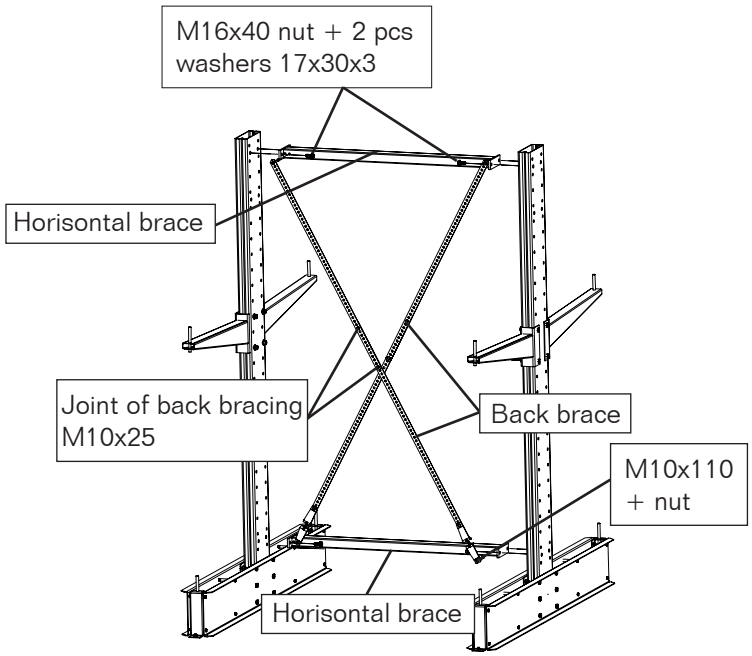
Ex



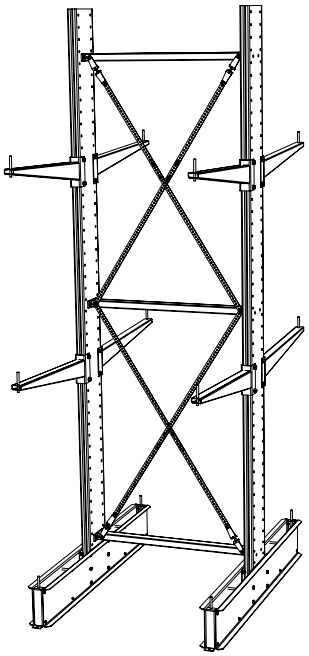
The number of back braces at each section (Counts all pillar dimensions)

C/C Upright	Upright height 3000			Upright height 4000			Upright height 5000			Upright height 6000		
	Brace lenght			Brace lenght			Brace lenght			Brace lenght		
	1000	1500	3000	1000	1500	3000	1000	1500	3000	1000	1500	3000
1000		4		2		2	4	4			8	
1250		4		2		2	4	4			8	
1500		4		2		2		8		4		4
2000	2		2	2		2		8		4		4
2500	2		2		2	2	4		4	4		4

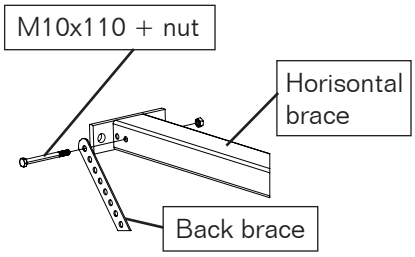
Single bracing
Upright height 3 and 4 meter



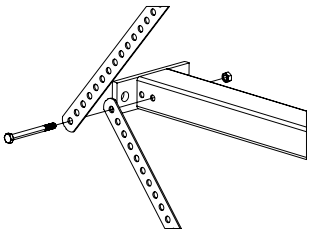
Double bracing
Upright height 5 and 6 meter

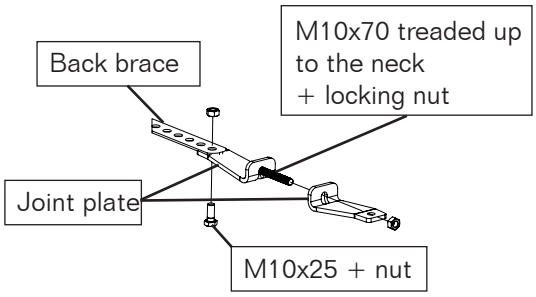


Single bracing



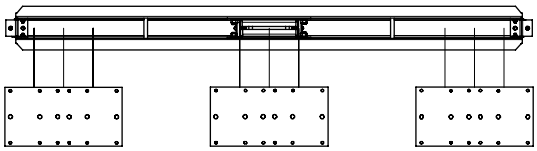
Double bracing



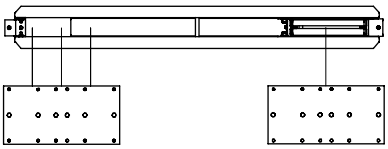


LEVELING

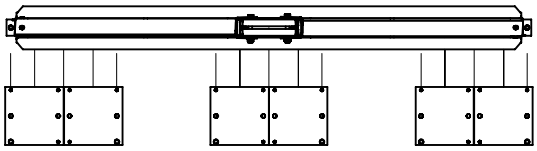
Location asphalt slab double foot



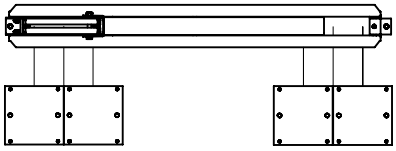
Location asphalt slab single foot



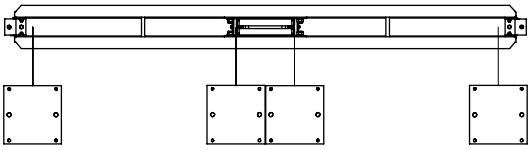
Location levelling double foot on asphalt



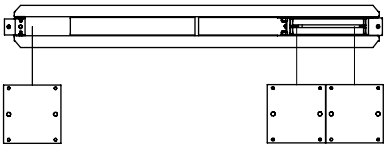
Location levelling single foot on asphalt

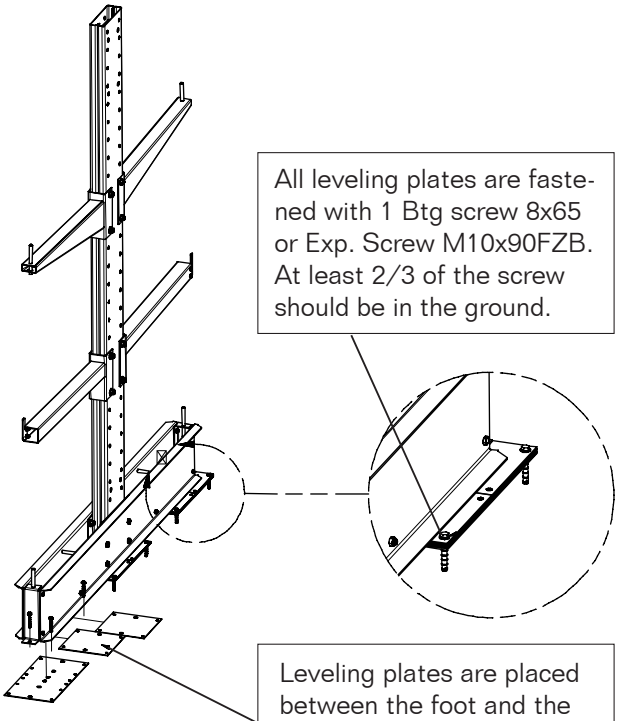


Location leveling double foot on concrete

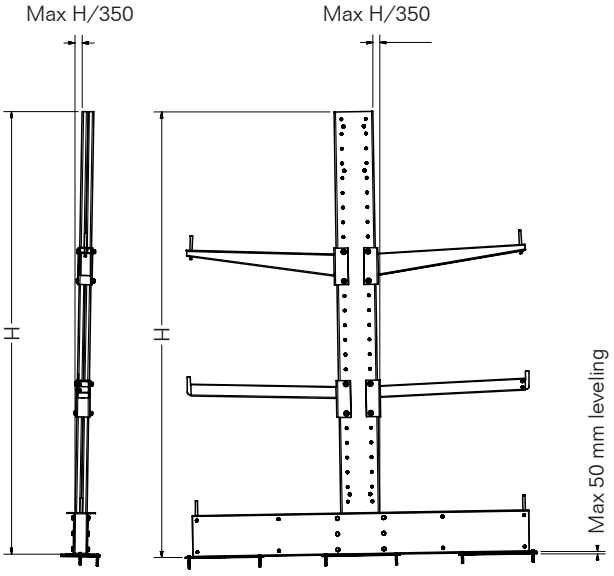


Location leveling single foot on concrete





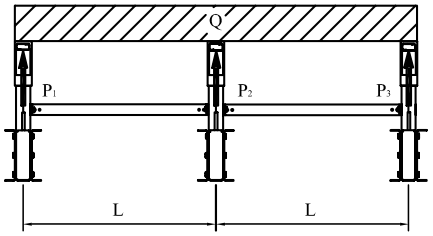
INSTALLATION TOLERANCES



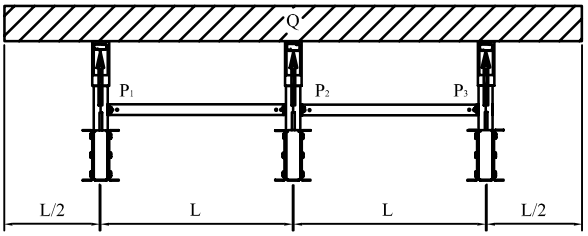
Maximum slope H / 350 on unloaded pillar measured immediately after installation.

PLACEMENT OF GOODS

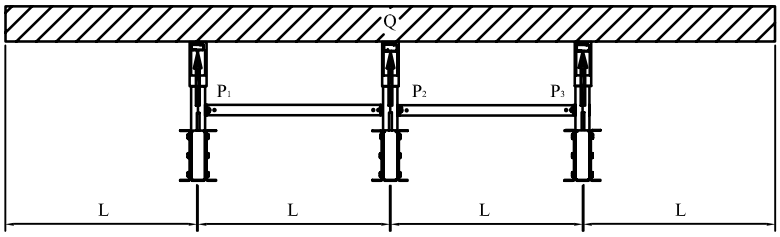
Different load cases



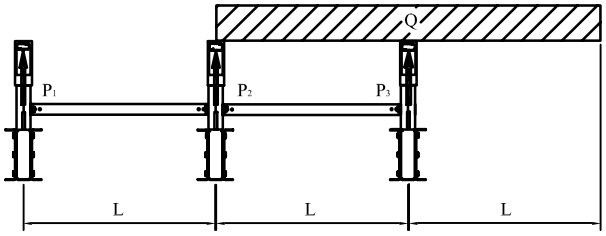
$P_1 = 0{,}2\ Q \quad P_2 = 0{,}6\ Q \quad P_3 = 0{,}2\ Q$



$P_1 = 0{,}35\ Q \quad P_2 = 0{,}3\ Q \quad P_3 = 0{,}35\ Q$



$P_1 = 0{,}5\ Q \quad P_2 = 0 \quad P_3 = 0{,}5\ Q$



$P_1 = 0 \quad P_2 = 0 \quad P_3 = Q$

Q = Equal distributed load
P = Load at each arm

Permitted load see table at the pillar.

SAFETY IN WAREHOUSES

EABs Cantilever racking meets all safety requirements under the European Supplier Code, FEM 10.2.09, which contains instructions for material selection, static calculations, testing, assembly and labeling.

Assembly / modification

To ensure safety, it is important that cantilever racking are always assembled in accordance with the instructions given here.

Marking

After assembly, a surely visible sign showing maximum allowed load shall be placed on the uprights.
The management shall supervise that the load limits are not exceeded.

Inspection

Erections inspection

Before starting to use the cantilever racking, it must be inspected in accordance with these instructions and in any special erection drawings.

Regular inspection

Cantilever racking must be regularly inspected in respect of locking devices, bracing, damage by vehicles etc. and anything else that could affect their strength.

Periodic inspection

Cantilever racking must be inspected at least every twelve moths to ensure that they continue to comply with these instructions and with any special erection drawings.

Re-inspection

Must always be performed if the positions of the arms and upright are moved. The purchaser or user is responsible for ensuring that the above inspections are performed.

EAB

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