

HILTI

**Installation Technical
Manual**

Typical Applications

**Product Line Typical
Applications**

MM System








Version 1.0 | April 2016

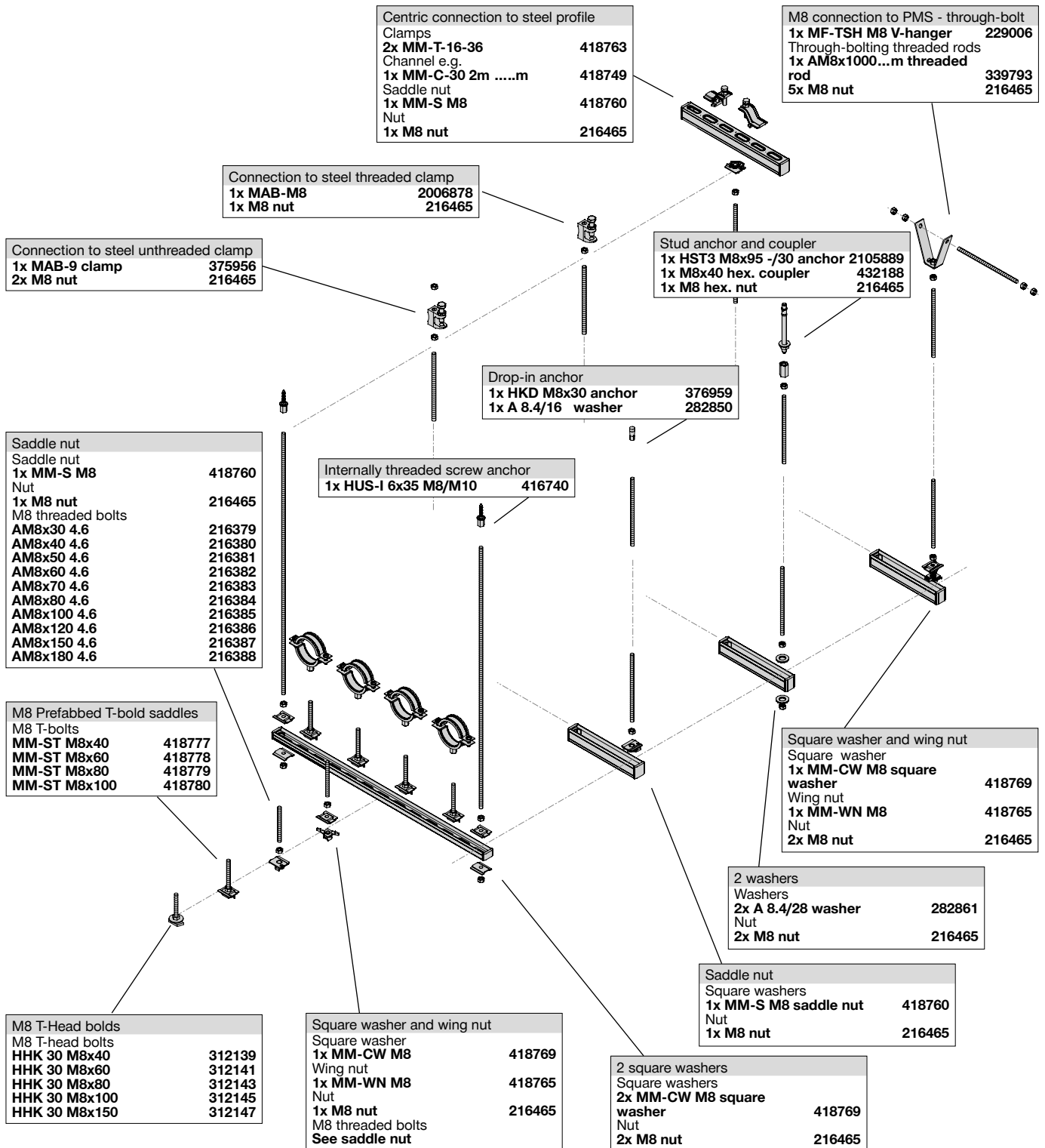
Terms of common cooperation / legal disclaimers

Hilti strives to achieve continuous development and innovation. This manual is thus subject to change without notice. Hilti strongly advises customers to verify the respective product application for the intended use by consulting a structural engineer and making the necessary calculations to ensure compliance with the applicable norms and standards. It is essential that the product is used strictly in accordance with the applicable Hilti instructions for use and within the application limits specified in the Hilti technical data sheets, technical specifications and supporting product literature. Due to the fact that construction materials and environmental conditions vary widely, information given in this manual is solely based on principles and safety factors believed to be correct at the time they were established. The customer is ultimately responsible for checking the present condition of supporting materials and the applicability of the selected product application. Hilti shall not be liable for direct, indirect, incidental or consequential damages, losses or expenses in connection with any information contained in this manual or in connection with, or by reason of, the use of, or inability to use the products for any intended purpose. This limitation of liability does not apply to personal damages culpably caused by Hilti. Implied warranties of merchantability or fitness of the products are herewith expressly excluded.

Contents and overview of this manual

Application		Page
Ceiling applications		
	Application 1 - MM Trapeze on rods	5
	Application 2 - MM Trapeze frame	7
	Application 3 - MM Goal post	9
	Application 4 - MM Head rail	11
	Application 5 - MM Cantilever arm	13

Trapeze On Concrete, Steel, PMS - Options MM System



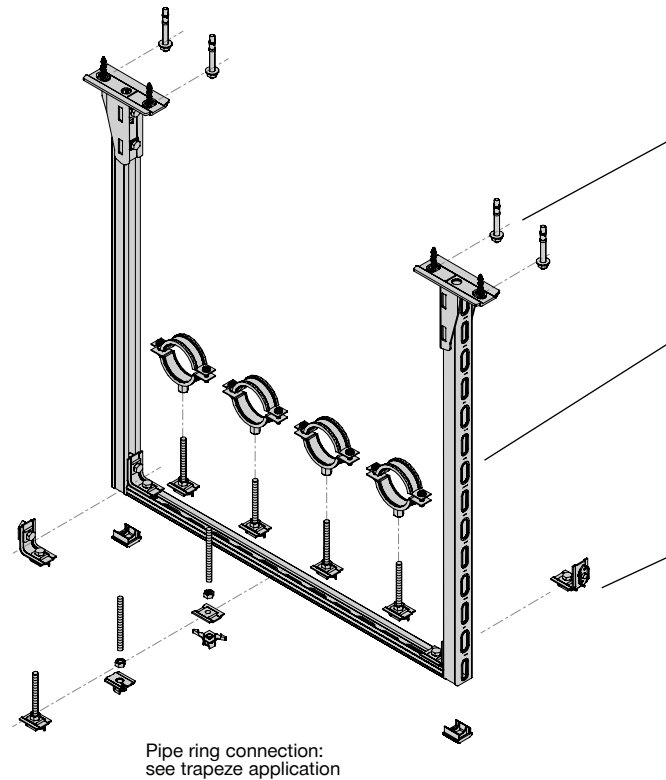
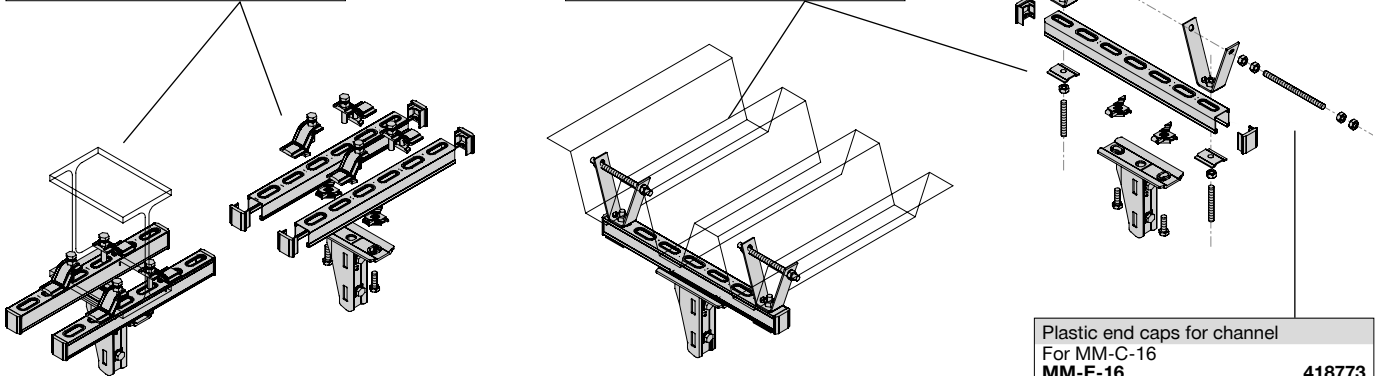
Application description	Application	Product lines	Base material
Trapeze		MM system	Concrete
General comments		V-hangers	Steel
		Pipe rings	PMS
<ul style="list-style-type: none"> Application not subject to any forces as used as a spacer for offset solutions 			

Trapeze Frame On Concrete, Steel, PMS - Options MM System

Channel connection to steel	
Clamps	
4x MM-T-16-36	418763
Channel e.g.	
2x MM-C-30 2m.....m	418749
Channel base	
1x MM-R-16-36	418762
Connection of the base	
2x MM-WN M8 wing nut	418765
2x M8x20 screw	216447

Channel connection to PMS	
V-hangers	
2x MF-TSH M8 V-hanger	229006
Nuts	
10x M8 nut	216465
Through-bolting threaded rods	
4x AM8x1000...m t-rod	339793
Channel e.g.	
1x MM-C-30 2m.....m	418749
Channel base	
1x MM-R-16-36	418762
Connection of the base	
2x MM-WN M8 wing nut	418765
2x M8x20 screw	216447

Plastic end caps for channel	
For MM-C-16	
MM-E-16	418773
For MM-C-30	
MM-E-30	418774
For MM-C-36	
MM-E-36	418775
For MM-C-45	
MM-E-45	2048095



Channel connection to concrete	
Channel base	
1x MM-R-16-36	418762
Screw anchor	
HUS-P 6x40/5	416745
HUS-P 6x40/5 bulk	428663
or	
Stud anchor	
2x HST3 M8x75 -/10	2105888
HST2 M8x75/10	2108161

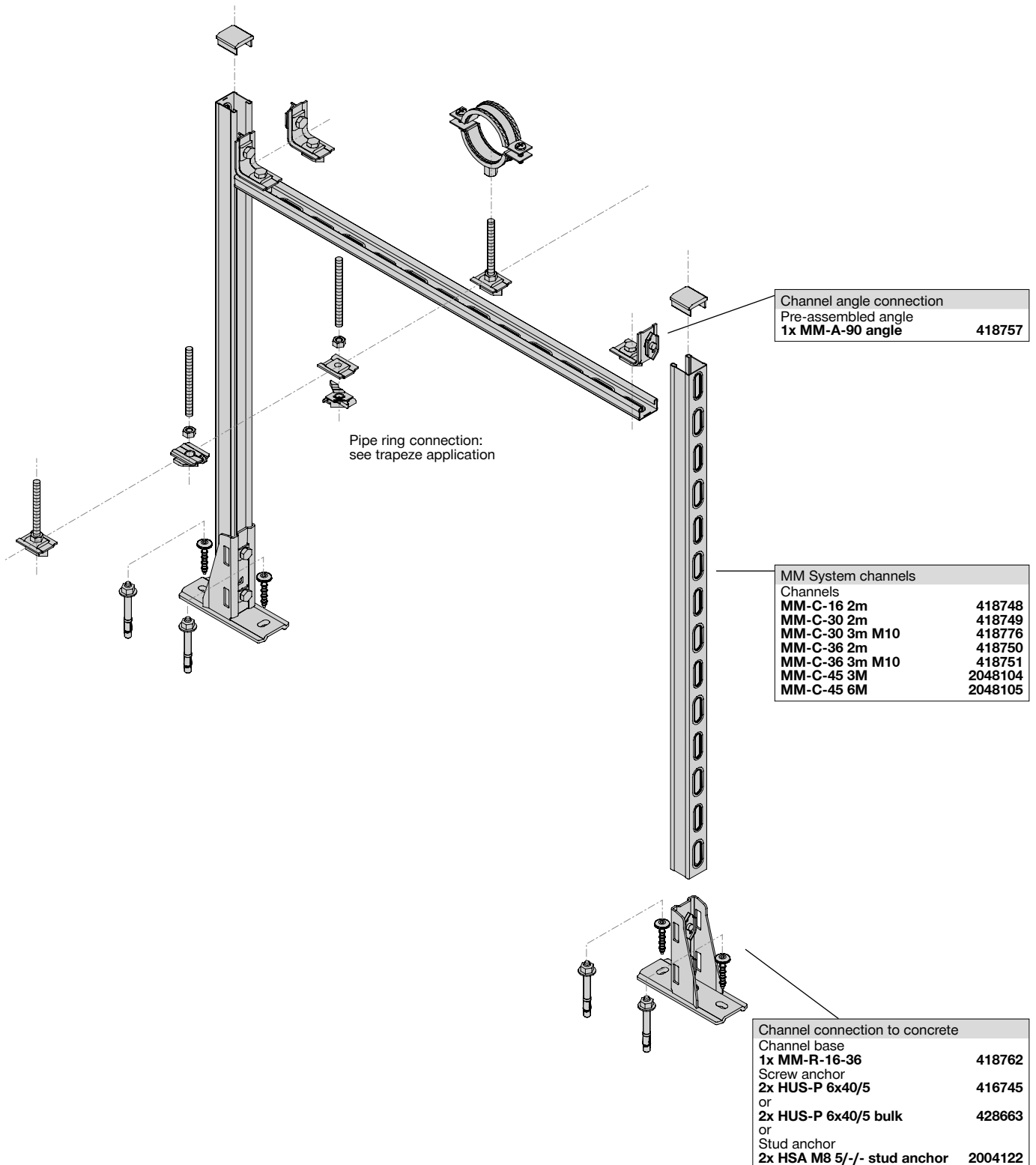
MM System channels	
Channels	
MM-C-16 2m	418748
MM-C-30 2m	418749
MM-C-30 3m M10	418776
MM-C-36 2m	418750
MM-C-36 3m M10	418751
MM-C-45 3M	2048104
MM-C-45 6M	2048105

Channel angle connection	
Pre-assembled angle	
1x MM-A-90 angle	418757

Pipe ring connection:
see trapeze application

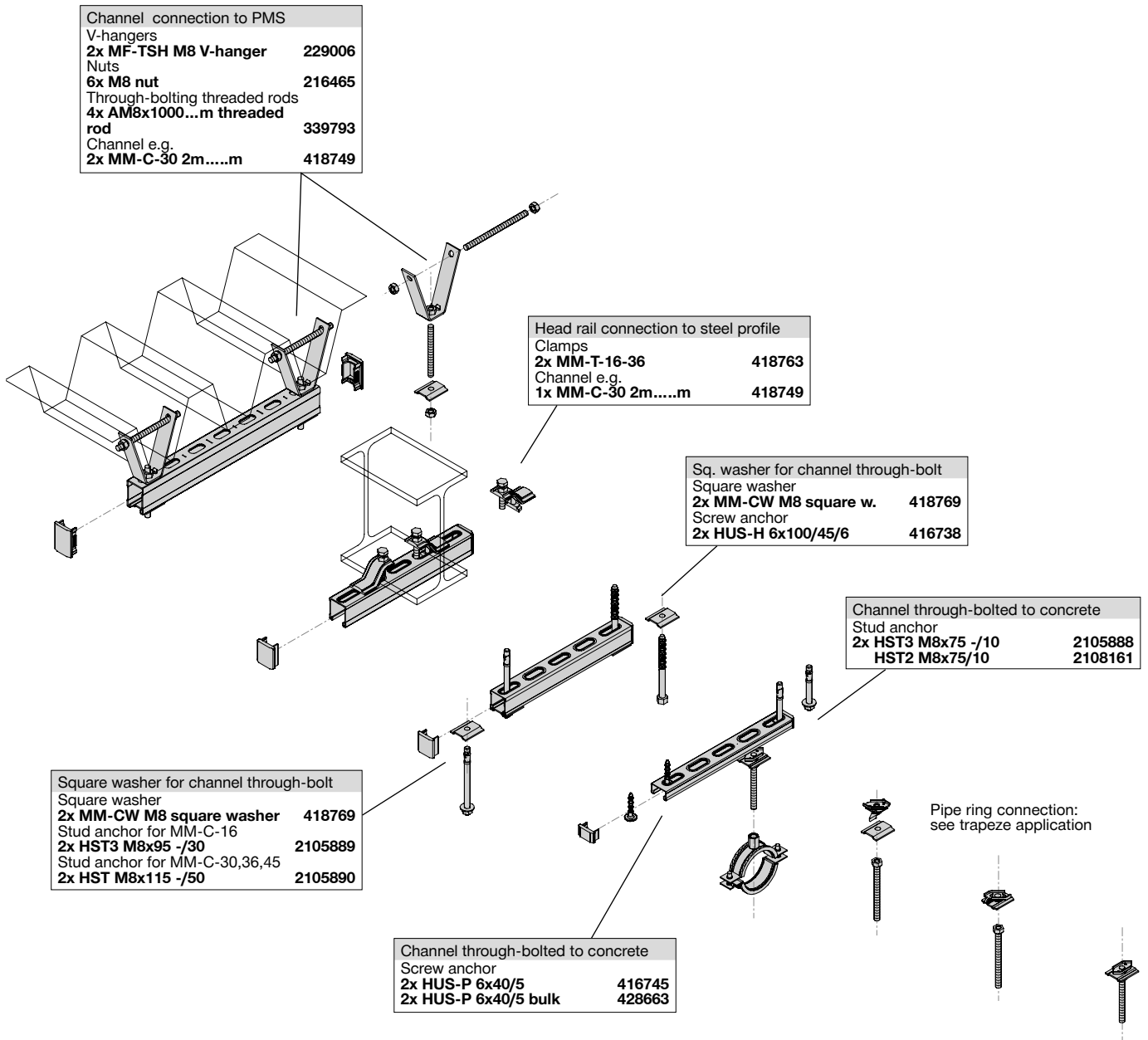
Application description	Application	Product lines	Base material
Trapeze frame		MM system	Concrete
General comments		Pipe rings	Steel
<ul style="list-style-type: none"> Application subject to vertical loads caused by weight of the pipes Application not subject to any thermal expansion or any other 3D loads 			PMS

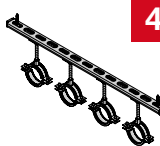
Goal Post Frame On Concrete - Options MM System



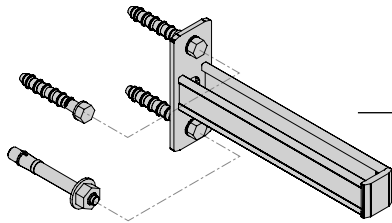
Application description	Application	Product lines	Base material
Goal post		MM system	Concrete
General comments		Pipe rings	
<ul style="list-style-type: none"> Application subject to vertical loads caused by weight of the pipes Application not subject to any thermal expansion or any other 3D loads 			

Head Rail On Concrete, Steel, PMS - Options MM System

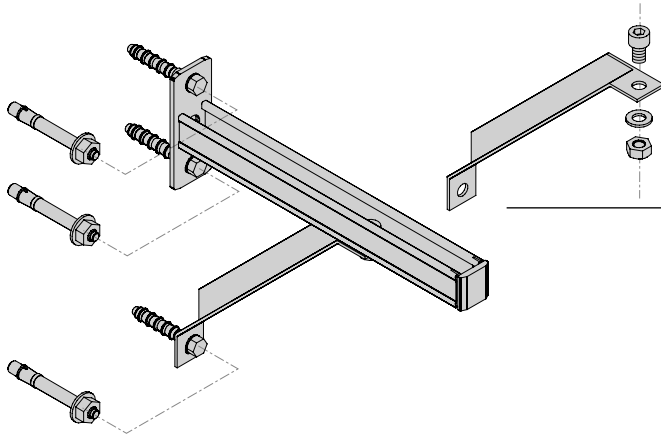


Application description	Application	Product lines	Base material
Head rail	 4	MM system	Concrete
General comments <ul style="list-style-type: none"> Application subject to vertical loads caused by weight of the pipes Application not subject to any thermal expansion or any other 3D loads 		V-hangers	Steel
		Pipe rings	PMS

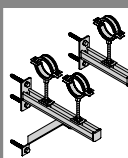
Cantilever Arm On Concrete - Options MM System



Single supported bracket to concrete	
Bracket	
MM-B-30/200	418752
MM-B-30/300	418753
MM-B-36/300	418754
MM-B-36/450	418755
MM-B-36/600	418756
Screw anchor	
2x HUS3-H 8x55/-/-	2079794
or	
Stud anchor	
2x HSA M10 5/-/-	2004127



Braced bracket to concrete	
Bracket	
Bracket
Brace	
1x MM-AB brace	418772
Fastening brace to bracket	
1x cyl. screw M10x16	216474
1x A10.5/20 washer	282851
1x M8 nut	216466
Screw anchor	
3x HUS3-H 8x55/-/-	2079794
Stud anchor	
3x HSA M10 5/-/-	2004127

Application description	Application	Product lines	Base material
Cantilever arm	 5	MM system	Concrete
General comments			
<ul style="list-style-type: none"> Application subject to vertical loads caused by weight of the pipes Application not subject to any thermal expansion or any other 3D loads 			

Hilti. Outperform. Outlast.

Hilti Corporation | 9494 Schaan | Liechtenstein | P +423-234 2111 | www.facebook.com/hiltigroup | www.hilti.com