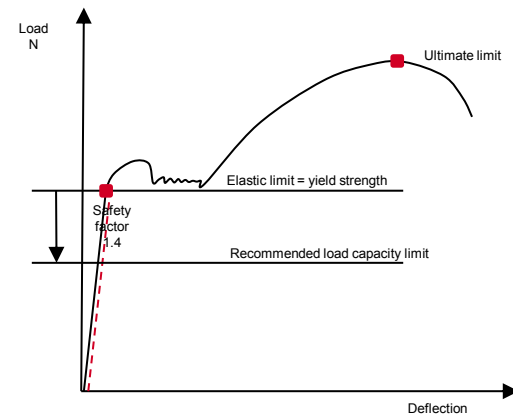


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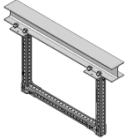


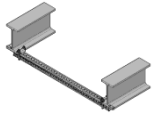
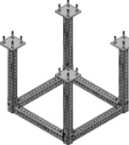
## Loading capacity limit

All loading capacity limits in catalogues and application manuals are to be considered as recommended values.  
Recommended values are calculated from the elastic limit equal to yield strength, with an applied material safety factor 1.0 for connectors and MI girders or 1.1 for MIQ girders and applied additional safety factor of 1.5.

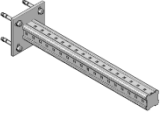



# Contents and overview of this manual



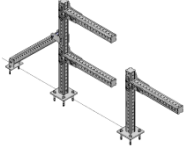
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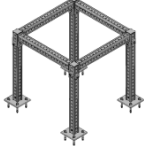
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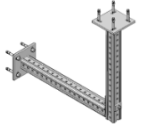
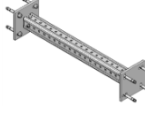
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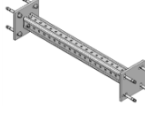
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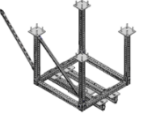
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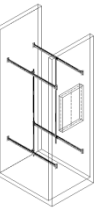
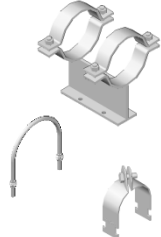
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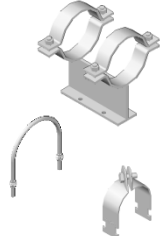


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MI System - Trapeze Frame On Concrete - Options

1	Connector MIC-U MI-90 fixed on MI-90
26	Connector MIC-U MI-90 fixed on rotated MI-120
1x	MIC-90-U 304803 incl. all connectivity material

2	Connector MIC-U MI-90 fixed on MI-120
1x	MIC-90-U 304803 incl. all connectivity material
1x	MIA-EH120 easy screw 304888 the original MIA-EH 90 from the package will remain unused

4	Connector MIC-U MI-120 fixed on MI-120
1x	MIC-120-U 304804 incl. all connectivity material
1x	MIA-EH120 easy screw 304888 the original MIA-EH 90 from the package will remain unused

5	Connector MIC-U MI-120 fixed on rotated MI-120
1x	MIC-120-U 304804 incl. all connectivity material

13	Connector MIC-90-LH MI-90 fixed on MI-90
14	Connector MIC-90-LH MI-90 fixed on MI-120
15	Connector MIC-90-LH MI-120 fixed on MI-90
16	Connector MIC-90-LH MI-120 fixed on MI-120
Angle does not include all connectivity material	
1x	MIC-90-LH 2048107
Connectivity material ordered separately	
4x	MIA-EH90 easy hand screw 304887
4x	MIA-TP serrated plate 305707
4x	M12-F-SL-WS ¾" lock nut 382897

6	Connector MIC-L MI-90 fixed on MI-90
1x	MIC-90-L 304805 incl. all connectivity material

3	Connector MIC-U MI-120 fixed on MI-90
1x	MIC-120-U 304804 incl. all connectivity material

7	Connector MIC-L MI-90 fixed on MI-120
1x	MIC-90-L 304805 incl. all connectivity material
2x	MIA-EH120 easy screw 304888 the original MIA-EH 90 from the package will remain unused

8	Connector MIC-L MI-90 fixed on rotated MI-120
1x	MIC-90-L 304805 incl. all connectivity material

20	Connector MIC-120-D Concrete connector for MI-90
1x	MIC-C120-D connector 304829 contains connectors and all through bolts
4x	HST3-R M16x135 35/15 2105876 stud anchor

21	Brackets MIC-C120-D for concrete
Bracket (Cantilever arm)	
1x	MIC-C120-D-500 270468
	MIC-C120-D-750 270469
	MIC-C120-D-1000 270470
	MIC-C120-D-1500 270471
	MIC-C120-D-2000 270472
Anchors	
4x	HST3-R M16x135 35/15 2105876

19	Brackets MIC-C90-D for concrete
Bracket (Cantilever arm)	
1x	MIC-C90-D-500 267789
	MIC-C90-D-750 267790
	MIC-C90-D-1000 267791
	MIC-C90-D-1500 267792
	MIC-C90-D-2000 267793
Anchors	
4x	HST3-R M16x135 35/15 2105876

18	Connector MIC-C90-D Concrete connector for MI-90
1x	MIC-C90-D connector 304827 contains connectors and all through bolts
Anchors	
4x	HST3-R M16x135 35/15 2105876


17	Connector MIC-C90-AA Concrete connector for MI-90
1x	MIC-C90-AA connector 304825 contains connectors and all through bolts
Anchors	
2x	HST3-R M12x115 40/20 2105870

22	Girders MI-90
	MI-90 3m girders 304798
	MI-90 6m girders 304799

23	Girders MI-120
	MI-120 3m girders 304800
	MI-120 6m girders 304801

24	Plastic end cap MIA-EC-90 End cap for MI-90
1x	MIA-EC-90 plastic endcap 432077

24	Plastic end cap MIA-EC-120 End cap for MI-120
1x	MIA-EC-120 plastic endcap 432078

Application description		Application	Product lines	Base material	
MI System - Trapeze Frame On Concrete				MI System	Concrete
General comments				Anchors	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations				Accessories	
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# MI/MIQ System - Trapeze Frame On Concrete - Options

1	Connector MIQC-90-MI MIQ-90 fixed on MI-90	
3	Connector MIQC-90-MI MIQ-90 fixed on rotated MI-120	
1x	MIQC-90-MI	2140257
	incl. all connectivity material	

2	Connector MIQ-90-MI MIQ-90 fixed on MI-120	
1x	MIQC-90-MI	2140257
	incl. all connectivity material	
1x	MIA-EH120 easy screw	304888
	the original MIA-EH 90 from the package will remain unused	

4	Connector MIQC-90-MI-V MIQ-90 fixed on MI-90	
6	Connector MIQC-90-MI-V MIQ-90 fixed on rotated MI-120	
1x	MIQC-90-MI-V	2140258
	incl. all connectivity material	

5	Connector MIQC-90-MI-V MIQ-90 fixed on MI-120	
1x	MIQC-90-MI-V	2140258
	incl. all connectivity material	
1x	MIA-EH120 easy screw	304888
	the original MIA-EH 90 from the package will remain unused	

7	Connector MIC-90-LH MIQ-90 fixed on MI-90	
8	Connector MIC-90-LH MIQ-90 fixed on MI-120	
Angle does not include all connectivity material		
1x	MIC-90-LH	2048107
Connectivity material ordered separately		
4x	MIA-EH90 easy hand screw	304887
4x	MIA-TP serrated plate	305707
4x	M12-F-SL-WS ¾" lock nut	382897

12	Connector MIC-120-D Concrete connector for MI-90	
1x	MIC-C120-D connector contains connectors and all through bolts	304829
4x	HST3-R M16x135 35/15 stud anchor	2105876

13	Brackets MIC-C120-D for concrete	
Bracket (Cantilever arm)		
1x	MIC-C120-D-500	270468
	MIC-C120-D-750	270469
	MIC-C120-D-1000	270470
	MIC-C120-D-1500	270471
	MIC-C120-D-2000	270472
Anchors		
4x	HST3-R M16x135 35/15	2105876

11	Brackets MIC-C900-D for concrete	
Bracket (Cantilever arm)		
1x	MIC-C90-D-500	267789
	MIC-C90-D-750	267790
	MIC-C90-D-1000	267791
	MIC-C90-D-1500	267792
	MIC-C90-D-2000	267793
Anchors		
4x	HST3-R M16x135 35/15	2105876

10	Connector MIC-C90-D Concrete connector for MI-90	
1x	MIC-C90-D connector contains connectors and all through bolts	304827
Anchors		
4x	HST3-R M16x135 35/15	2105876

9	Connector MIC-C90-AA Concrete connector for MI-90	
1x	MIC-C90-AA connector contains connectors and all through bolts	304825
Anchors		
2x	HST3-R M12x115 40/20	2105870

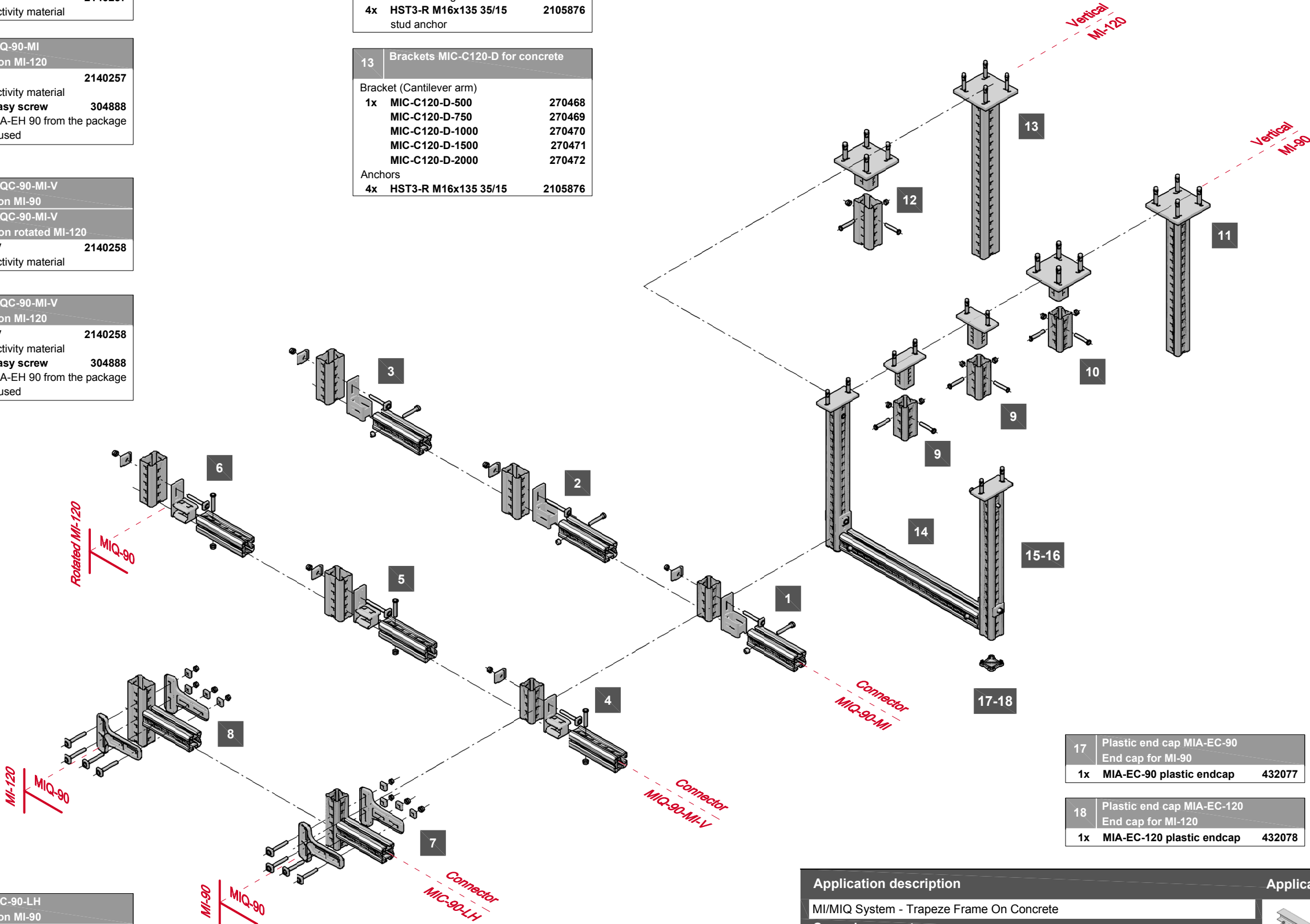
14	Girders MIQ-90	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

15	Girders MI-90	
	MI-90 3m girders	304798
	MI-90 6m girders	304799

16	Girders MI-120	
	MI-120 3m girders	304800
	MI-120 6m girders	304801

17	Plastic end cap MIA-EC-90 End cap for MI-90	
1x	MIA-EC-90 plastic endcap	432077

18	Plastic end cap MIA-EC-120 End cap for MI-120	
1x	MIA-EC-120 plastic endcap	432078



## Application description

MI/MIQ System - Trapeze Frame On Concrete

## General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

## Application



## Product lines

## Base material

1	MI/MIQ System	Concrete
	Anchors	
	Accessories	

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# MI System - Trapeze Frame On Steel - Vertical Upright MI-90 Options

24	Connector MIC-S90-AA Clamping on flange "Type A"	
1x	MIC-S90-AA connector incl. all connectivity material	304811
2x	MI-SGC M12 beam clamp	233859

8	Connector MIC-S90-A Clamping on flange "Type A"	
1x	MIC-S90-A connector incl. all connectivity material	304812
4x	MI-SGC M12 beam clamp	233859

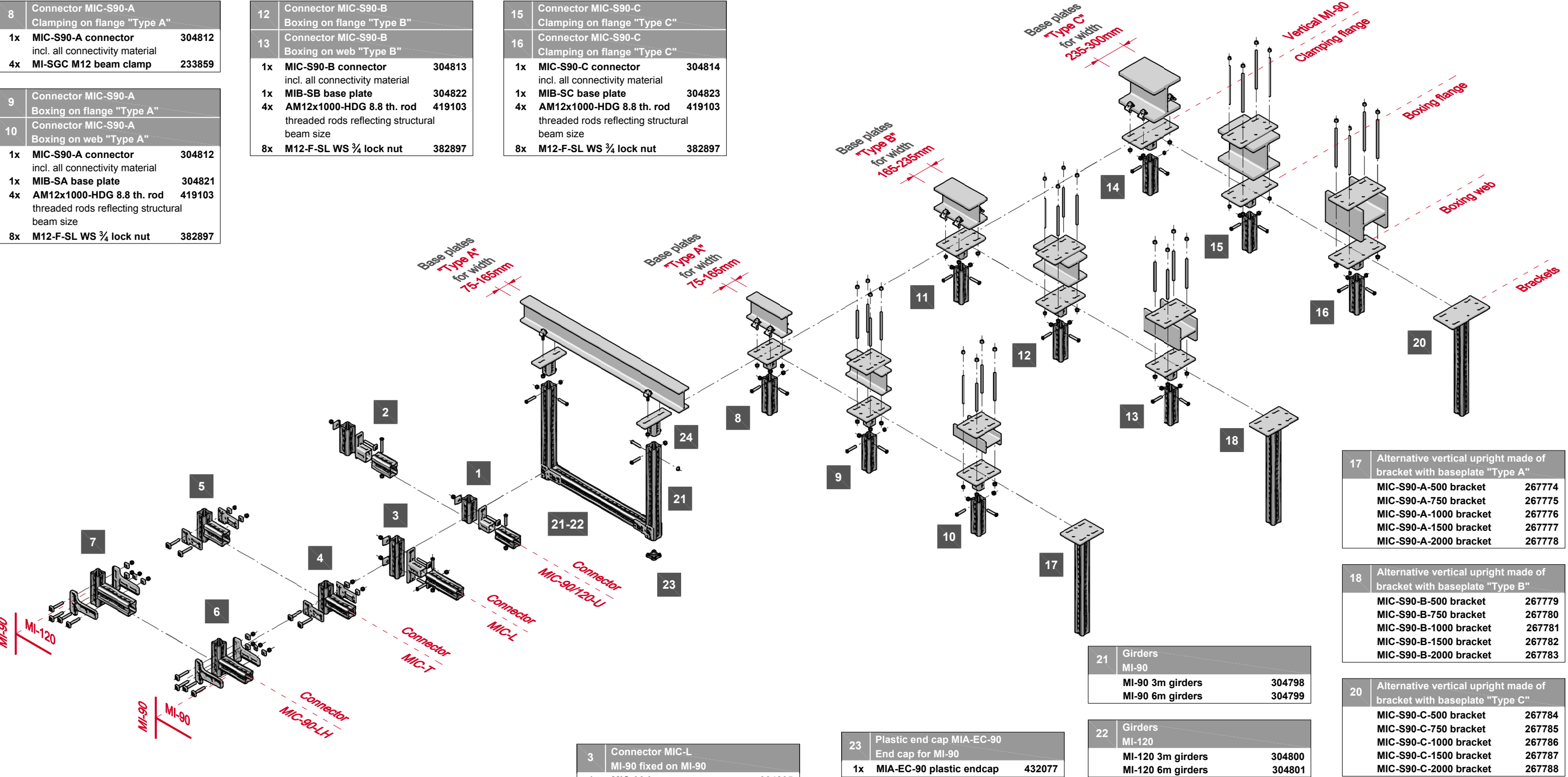
9	Connector MIC-S90-A Boxing on flange "Type A"	
10	Connector MIC-S90-A Boxing on web "Type A"	
1x	MIC-S90-A connector incl. all connectivity material	304812
1x	MIB-SA base plate	304821
4x	AM12x1000-HDG 8.8 th. rod threaded rods reflecting structural beam size	419103
8x	M12-F-SL WS ¾ lock nut	382897

11	Connector MIC-S90-B Clamping on flange "Type B"	
1x	MIC-S90-B connector incl. all connectivity material	304813
4x	MI-SGC M12 beam clamp	233859

12	Connector MIC-S90-B Boxing on flange "Type B"	
13	Connector MIC-S90-B Boxing on web "Type B"	
1x	MIC-S90-B connector incl. all connectivity material	304813
1x	MIB-SB base plate	304822
4x	AM12x1000-HDG 8.8 th. rod threaded rods reflecting structural beam size	419103
8x	M12-F-SL WS ¾ lock nut	382897

14	Connector MIC-S90-C Clamping on flange "Type C"	
1x	MIC-S90-C connector incl. all connectivity material	304814
4x	MI-SGC M12 beam clamp	233859

15	Connector MIC-S90-C Clamping on flange "Type C"	
16	Connector MIC-S90-C Clamping on flange "Type C"	
1x	MIC-S90-C connector incl. all connectivity material	304814
1x	MIB-SC base plate	304823
4x	AM12x1000-HDG 8.8 th. rod threaded rods reflecting structural beam size	419103
8x	M12-F-SL WS ¾ lock nut	382897




6	Connector MIC-90-LH MI-90 fixed on MI-90	
7	Connector MIC-90-LH MI-120 fixed on MI-90	
Angle does not include all connectivity material		
1x	MIC-90-LH	2048107
Connectivity material ordered separately		
4x	MIA-EH90 easy hand screw	304887
4x	MIA-TP serrated plate	305707
4x	M12-F-SL-WS ¾ lock nut	382897

4	Connector MIC-T MI-90 fixed on MI-90	
5	Connector MIC-T MI-120 fixed on MI-90	
1x	MIC-T	304807
incl. all connectivity material		

3	Connector MIC-L MI-90 fixed on MI-90	
1x	MIC-90-L	304805
incl. all connectivity material		

2	Connector MIC-U MI-120 fixed on MI-90	
1x	MIC-120-U	304804
incl. all connectivity material		

1	Connector MIC-U MI-90 fixed on MI-90	
1x	MIC-90-U	304803
incl. all connectivity material		

Application description	Application	Product lines	Base material
MI System - Trapeze Frame On Steel		MI System	Steel
General comments		Clamps	
<ul style="list-style-type: none"><li>• These pictures do not show any loading capacity limits or exposure or limitation to any load combinations</li></ul>		Accessories	
<p>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. Failure to consult and heed the advice of a structural engineer will free Hilti from any liability. It is essential that the product is used strictly in accordance with the applicable Hilti instructions for use, within the application limits specified in the Hilti technical data sheets, technical specifications and supporting product literature, and that the relevant application limits are not exceeded at any time. All rights reserved by Hilti Corporation. Duplication, utilization and/or publication of drawings contained in this manual are not permitted unless expressly agreed by Hilti Corporation.</p>			

# MI System - Trapeze Frame On Steel - Vertical Upright MI-120 Options

7	Connector MIC-S120-A Clamping on flange "Type A"	
1x	MIC-S120-A connector incl. all connectivity material	304818
4x	MI-SGC M12 beam clamp	233859

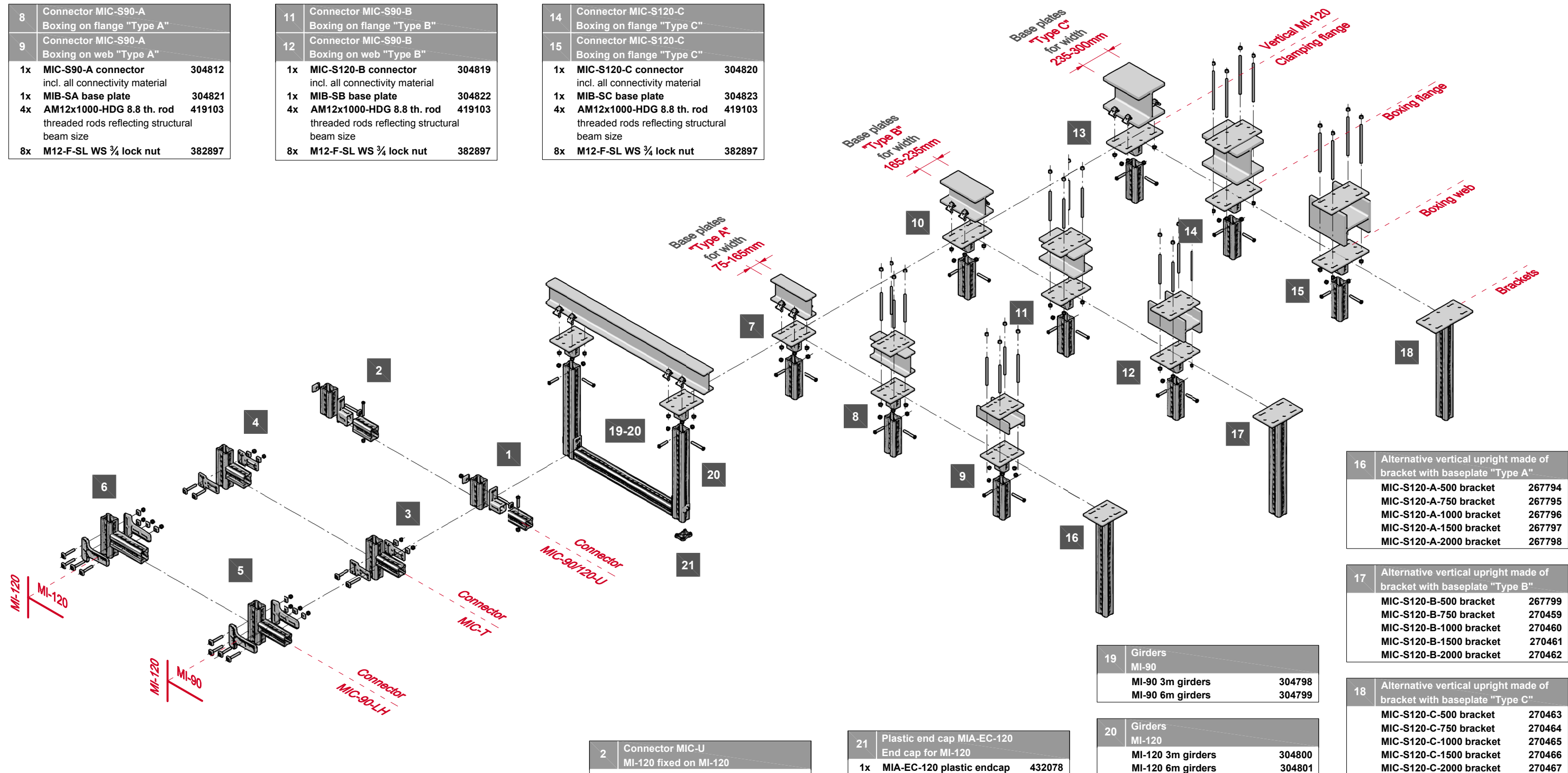
10	Connector MIC-S120-B Clamping on flange "Type B"	
1x	MIC-S120-B connector incl. all connectivity material	304819
4x	MI-SGC M12 beam clamp	233859


13	Connector MIC-S120-C Clamping on flange "Type C"	
1x	MIC-S120-C connector incl. all connectivity material	304820
4x	MI-SGC M12 beam clamp	233859

8	Connector MIC-S90-A Boxing on flange "Type A"	
9	Connector MIC-S90-A Boxing on web "Type A"	
1x	MIC-S90-A connector incl. all connectivity material	304812
1x	MIB-SA base plate	304821
4x	AM12x1000-HDG 8.8 th. rod threaded rods reflecting structural beam size	419103
8x	M12-F-SL WS ¾ lock nut	382897

11	Connector MIC-S90-B Boxing on flange "Type B"	
12	Connector MIC-S90-B Boxing on web "Type B"	
1x	MIC-S120-B connector incl. all connectivity material	304819
1x	MIB-SB base plate	304822
4x	AM12x1000-HDG 8.8 th. rod threaded rods reflecting structural beam size	419103
8x	M12-F-SL WS ¾ lock nut	382897

14	Connector MIC-S120-C Boxing on flange "Type C"	
15	Connector MIC-S120-C Boxing on flange "Type C"	
1x	MIC-S120-C connector incl. all connectivity material	304820
1x	MIB-SC base plate	304823
4x	AM12x1000-HDG 8.8 th. rod threaded rods reflecting structural beam size	419103
8x	M12-F-SL WS ¾ lock nut	382897



Application description	Application	Product lines	Base material
MI System - Trapeze Frame On Steel		MI System	Steel
General comments		Clamps	
		Accessories	

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## MIQ System - Trapeze Frame On Steel - Boxed Options

1	Connector MIQC-90-HS MIQC-90 fixed on MI-90	
1x	MIQC-90-HS incl. all connectivity material	2123880

2	Connector MIQC-90-HT MIQ-90 fixed on MIQ-90	
1x	MIQC-90-HT incl. all connectivity material	2123881

3	Connector MIQC-90-HT-V MIQ-90 fixed on MIQ-90	
1x	MIQC-90-HT-V incl. all connectivity material	2134818

4	Connector MIQC-90-L MIQ-90 fixed on MIQ-90	
5	Connector MIQC-90-L MIQ-90 fixed on MIQ-90	
1x	<b>MIQC-90-L</b> incl. all connectivity material	<b>2119868</b>

6	Connector MIQC-90-L MIQ-90 fixed on MIQ-90	
2x	MIQC-90-L incl. all connectivity material	2119868

7	Connector MIC-90-LH MIQ-90 fixed on MIQ-90
Angle does not include all connectivity material	
1x	MIC-90-LH 2048107
Connectivity material ordered separately	
4x	MIA-EH90 easy hand screw 304887
4x	MIA-TP serrated plate 305077
4x	M12-F-SL-WS ¾" lock nut 382897

12	<b>Boxing flange "Type B" upper connector</b> Steel beam parallel to trapeze
13	<b>Boxing web "Type B" upper connector</b> Steel beam parallel to trapeze
1x	<b>MIQC-S90-BP connector</b> 2120273 Contains connector and all through bolts
1x	<b>MIQB-SB base plate</b> 2123566
8x	<b>M12-F-SL W53/4 lock nut</b> 382897
4x	<b>AM12x1000-HDG 8.8 t-rod</b> 419103 threaded rods reflecting structural beam size


8	Boxing flange "Type A" upper connector Steel beam parallel to trapeze
9	Boxing web "Type A" upper connector Steel beam parallel to trapeze
1x	MIQC-S90-AP connector 2120271 Contains connector and all through bolts
1x	MIQB-SA base plate 2123565
8x	M12-F-SL WS34 lock nut 382897
4x	AM12x1000-HDG 8.8 t-rod 419103 threaded rods reflecting structural beam size

16	Girders	
	MIQ	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

17	Plastic end cap MIA-EC-90 End cap for MI-90	
1x	MIA-EC-90 plastic endcap	432077

10	Boxing flange "Type A" upper connector	
	Steel beam perpendicular to trapeze	
11	Boxing web "Type A" upper connector	
	Steel beam perpendicular to trapeze	
1x	MIQC-S90-AC connector	2120270
	Contains connector and all through bolts	
1x	MIQB-SA base plate	2123565
8x	M12-F-SL WS34 lock nut	382897
4x	AM12x1000-HDG 8.8 t-rod	419103
	threaded rods reflecting structural beam size	

14	<b>Boxing flange "Type B" upper connector</b> Steel beam perpendicular to trapeze
15	<b>Boxing web "Type B" upper connector</b> Steel beam perpendicular to trapeze
1x	<b>MIQC-S90-BC connector</b> 2120272 Contains connector and all through bolts
1x	<b>MIQB-SB base plate</b> 2123566
8x	<b>M12-F-SL WS3/4 lock nut</b> 382897
4x	<b>AM12x1000-HDG 8.8 t-rod</b> 419103 threaded rods reflecting structural beam size

Application description	Application	Product lines	Base material
MIQ System - Trapeze Frame On Steel	 <div>1</div>	MIQ System	Steel
General comments		Clamps	
<ul style="list-style-type: none"> <li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li> </ul>		Accessories	

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MIQ System - Trapeze Frame On Steel - Clamped Options

1

Connector MIQC-90-HS  
MIQ-90 fixed on MI-90  
1x **MIQC-90-HS** 2123880  
incl. all connectivity material

2

Connector MIQC-90-HT  
MIQ-90 fixed on MIQ-90  
1x **MIQC-90-HT** 2123881  
incl. all connectivity material

3

Connector MIQC-90-HT-V  
MIQ-90 fixed on MIQ-90  
1x **MIQC-90-HT-V** 2134818  
incl. all connectivity material

4

Connector MIQC-90-L  
MIQ-90 fixed on MIQ-90

5

Connector MIQC-90-L  
MIQ-90 fixed on MIQ-90  
1x **MIQC-90-L** 2119868  
incl. all connectivity material

6

Connector MIQC-90-L  
MIQ-90 fixed on MIQ-90  
2x **MIQC-90-L** 2119868  
incl. all connectivity material

7

Connector MIC-90-LH  
MIQ-90 fixed on MIQ-90  
Angle does not include all connectivity material  
1x **MIC-90-LH** 2048107  
Connectivity material ordered separately  
4x **MIA-EH90 easy hand screw** 304887  
4x **MIA-TP serrated plate** 305707  
4x **M12-F-SL-WS 3/4"** lock nut 382897

8

Connector MIQC-S90-AP  
Clamping on flange "Type A"  
Connector for flange width 75-165mm  
1x **MIQC-S90-AP connector** 2120271  
Beam clamps  
4x **MI-SGC M12 beam clamp** 233859

9

Connector MIQC-S90-AC  
Clamping on flange "Type B"  
Connector for flange width 75-165mm  
1x **MIQC-S90-AC connector** 2120270  
Beam clamps  
4x **MI-SGC M12 beam clamp** 233859

10

Connector MIQC-S90-BP  
Clamping on flange "Type A"  
Connector for flange width 165-235mm  
1x **MIQC-S90-BP connector** 2120273  
Beam clamps  
4x **MI-SGC M12 beam clamp** 233859

11

Connector MIQC-S90-BP  
Clamping on flange "Type B"  
Connector for flange width 165-235mm  
1x **MIQC-S90-BC connector** 2120272  
Beam clamps  
4x **MI-SGC M12 beam clamp** 233859

12

Girders  
MIQ  
MIQ-90 3m girder 2119866  
MIQ-90 6m girder 2119867

13

Plastic end cap MIA-EC-90  
End cap for MI-90  
1x **MIA-EC-90 plastic endcap** 432077

1

Connector  
MIQC-90-HS

2

Connector  
MIQC-90-HT

3

Connector  
MIQC-90-HT-V

4

Connector  
MIQC-90-L

5

Connector  
MIQC-90-L

6

Connector  
2x MIQC-90-L

7

Connector  
MIC-90-LH

8

Connector  
MIQC-S90-AP

9

Connector  
MIQC-S90-AC

10

Connector  
MIQC-S90-BP

11

Connector  
MIQC-S90-BC

12

Girders  
MIQ

13

Plastic end cap MIA-EC-90

Base plates  
"Type A"  
for width  
75-165mm

Base plates  
"Type B"  
for width  
165-235mm

Parallel  
Options

Perpendicular  
Options

Application description

MIQ System - Trapeze Frame On Steel

General comments

• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application

1

MIQ System

Product lines

Clamps

Accessories

Base material

Steel

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MI/MIQ System - Trapeze On Rods On Concrete - Options

M16 Options

9	M16 base plate + 2x anchor	
1x	MFP-GP 16-F base plate	304279
2x	HST3-R M12x105 30/10 an.	2105869

8	M16 stud anchor + coupler	
1x	HST3-R M16x145 45/25	2105877
1x	M16x50-F coupler	304794
1x	M16-F nut	304767

7	M16 drop-in anchor	
1x	HKD SR M16x65 anchor	247955
1x	A 17/30 A4 washer	387989
1x	M16 A4-70 nut	52463

6	M16 threaded rods	
1x	AM16x1000-F 4.8 t-rod	304776
	AM16x2000-F 4.8 t-rod	304777

5	Trapeze rod connector MIC-TRC M16 For hanging on M16 threaded rods	
1x	MIC-TRC M16 incl. through bolt, bottom plate and upper washer	233857
2x	M16-F nut	304767

M12 Options

4	M12 stud anchor + coupler	
1x	HST3-R M12x115 40/20	2105870
1x	M12x40-F coupler	304793
1x	M12-F nut	304766

3	M12 drop-in anchor	
1x	HKD SR M12x50 anchor	247954
1x	A 13/24 A4 washer	58041
1x	M12 A4-70 nut	52462

2	M16 threaded rods	
1x	AM12x1000-F 4.8 t-rod	304774
	AM12x2000-F 4.8 t-rod	304775

1	Trapeze rod connector MIC-TRC M12-1/2" For hanging on M12 threaded rods	
1x	MIC-TRC M12-1/2" incl. through bolt, bottom plate and upper washer 1/2" plate remain	233856
2x	M12-F nut	304766

M20 Options

13	M20 base plate + 2x anchor	
1x	MFP-GP 20-F base plate	304251
2x	HST3-R M12x105 30/10 an.	2105869

12	M20 drop-in anchor	
1x	HKD SR M20x80 anchor	247956
1x	A 21/37 A4 washer	387990
1x	M20 A4-70 nut	387992

11	M20 threaded rod	
1x	AM20x1000-F 4.8 t-rod	304778

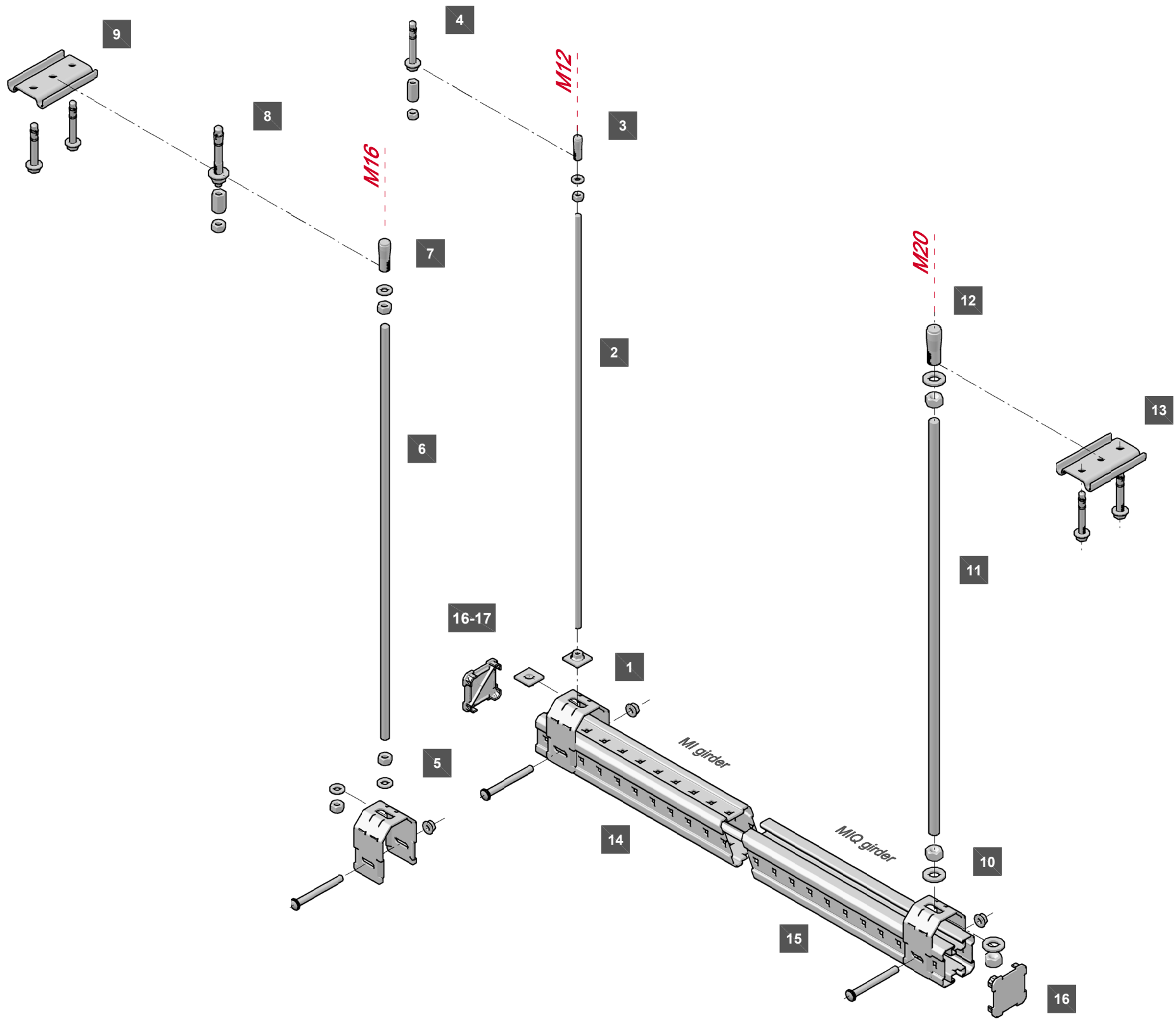
10	Trapeze rod connector MIC-TRC M20-3/4" For hanging on M20 threaded rods	
1x	MIC-TRC M20-3/4" incl. through bolt, bottom plate and upper washer	233858
2x	M20-F nut	304768


16	Plastic end cap MIA-EC-90 End cap for MI-90 and MIQ-90	
1x	MIA-EC-90 plastic endcap	432077

17	Plastic end cap MIA-EC-120 End cap for MI-120	
1x	MIA-EC-120 plastic endcap	432078

14	Girders MI	
	MI-90 3m girder	304798
	MI-90 6m girder	304799
	MI-120 3m girder	304800
	MI-120 6m girder	304801

15	Girders MIQ	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867



Application description	Application	Product lines	Base material
MI/MIQ System - Trapeze On Rods On Concrete	 <b>2</b>	MI/MIQ System	Concrete
General comments		Anchors	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations		Accessories	

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MI/MIQ System - Trapeze On Rods On Steel - Options

M12 Options

1	M12	
Connection on steel beam		
1x	MIC-TRC M12-1/2	233856
incl. through bolt, bottom plate and upper square washer 1/2" plate remain unused		
1x	M12-F nut	304766
1x	AM12x1000-F 4.8 t-rod	304774
1x	MI-90 3m ...m girder	304798
2x	MIA-EC-90 plastic endcaps	432077
2x	MI-DGC 90 beam clamps	233860

4	M12	
Threaded rods		
1x	AM12x1000-F 4.8 th. rod	304774
	AM12x2000-F 4.8 th. rod	304775

M16 Options

2	M16	
Connection on steel beam		
1x	MIC-TRC M16	233857
incl. through bolt, bottom plate and upper washer		
1x	M16-F nut	304767
1x	AM16x1000-F 4.8 t-rod	304776
1x	MI-90 3m ...m girder	304798
2x	MIA-EC-90 plastic endcaps	432077
2x	MI-DGC 90 beam clamps	233860

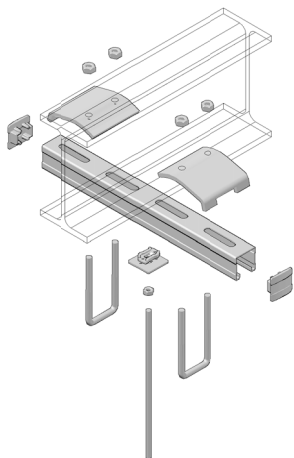
5	M16	
Threaded rods		
1x	AM16x1000-F 4.8 th. rod	304776
	AM16x2000-F 4.8 th. rod	304777

M20 Options

3	M20	
Connection on steel beam		
1x	MIC-TRC M20-3/4"	233858
incl. through bolt, bottom plate and upper washer		
1x	M20-F nut	304768
1x	AM20x1000-F 4.8 t-rod	304778
1x	MI-90 3m ...m girder	304798
2x	MIA-EC-90 plastic endcaps	432077
2x	MI-DGC 90 beam clamps	233860

6	M20	
Threaded rods		
1x	AM20x1000-F 4.8 th. rod	304778

Alternative MQ System calculated solutions can be used

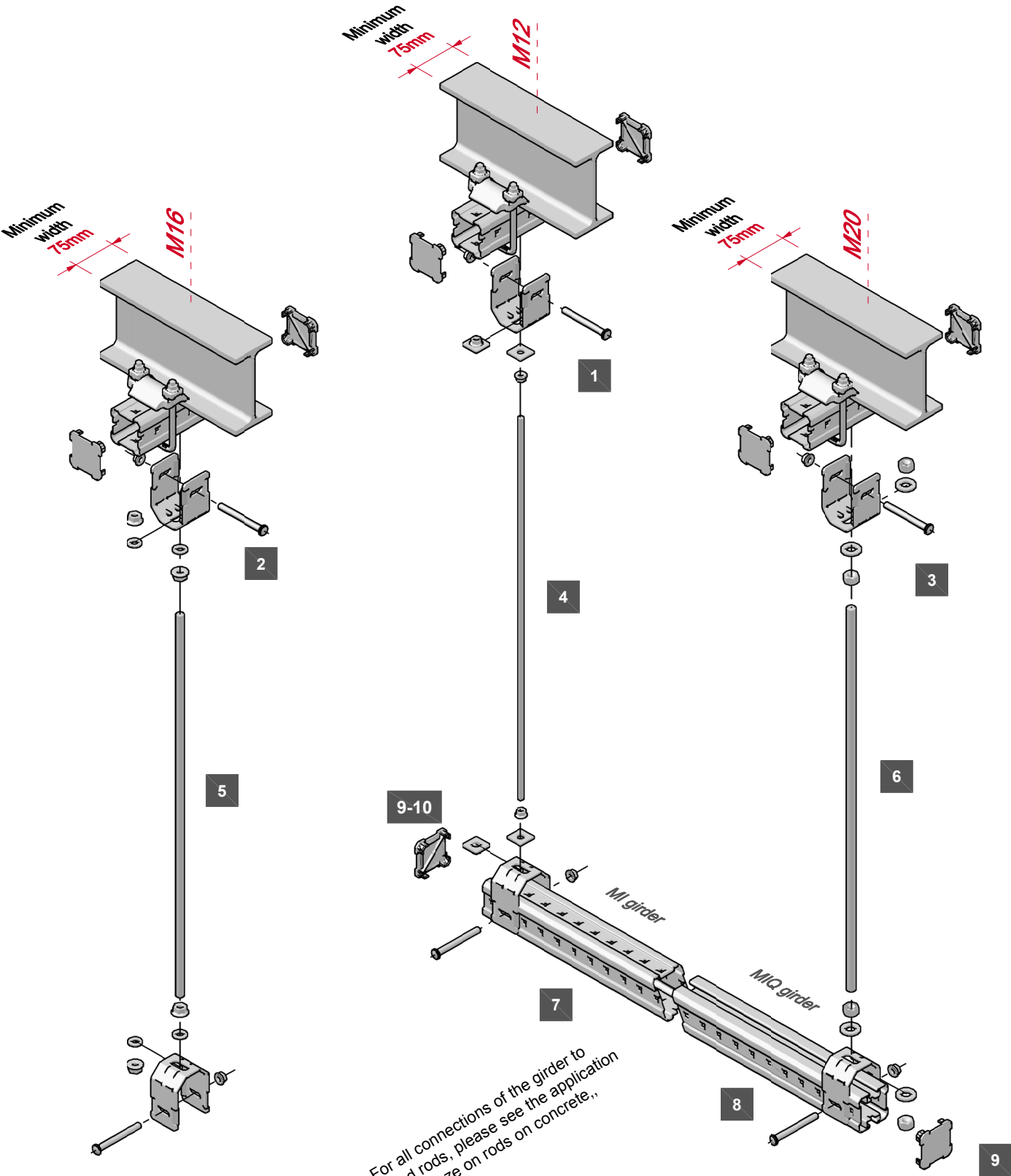


7	Girders	
MI		
	MI-90 3m girder	304798
	MI-90 6m girder	304799
	MI-120 3m girder	304800
	MI-120 6m girder	304801

8	Girders	
MIQ		
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

9	Plastic end cap MIA-EC-90	
End cap for MI-90 and MIQ-90		
1x	MIA-EC-90 plastic endcap	432077

10	Plastic end cap MIA-EC-120	
End cap for MI-120		
1x	MIA-EC-120 plastic endcap	432078



For all connections of the girder to threaded rods, please see the application „Trapeze on rods on concrete.“

Application description

MI/MIQ System - Trapeze On Rods On Steel

General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application

Product lines

Base material

2

MI/MIQ System

Steel

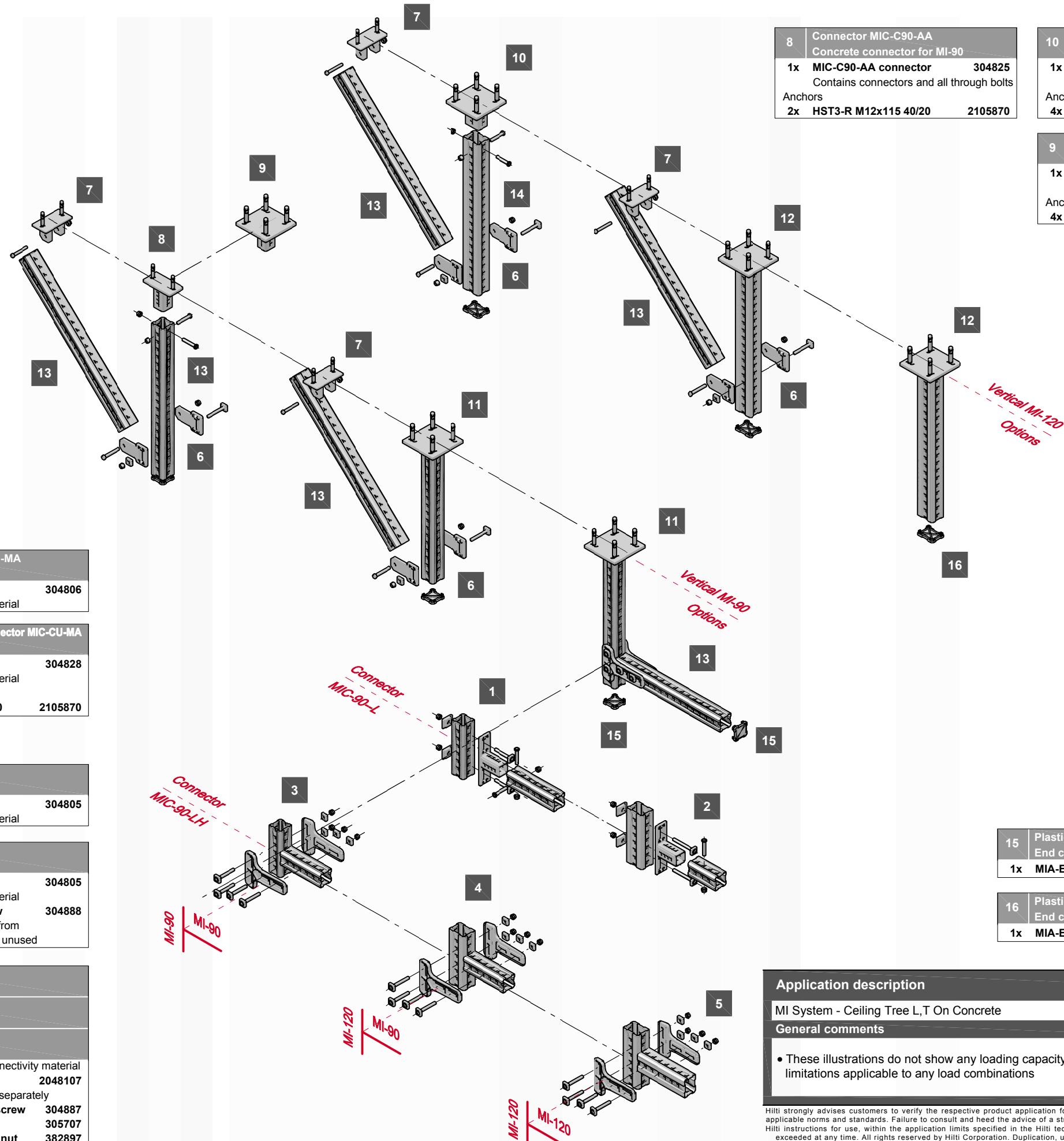
Clamps

Accessories

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## MI System - Ceiling Tree L,T On Concrete - Options



6	Pivot connector MIC-U-MA	
1x	MIC-U-MA incl. all connectivity material	304806

7	Base material pivot connector MIC-CU-MA	
1x	MIC-CU-MA incl. all connectivity material	304828
Anchors		
2x	HST3-R M12x115 40/20	2105870

1	Connector MIC-L MI-90 fixed on MI-90	
1x	<b>MIC-90-L</b> incl. all connectivity material	<b>304805</b>

<b>2</b>	<b>Connector MIC-L</b> <b>MI-90 fixed on MI-120</b>	
<b>1x</b>	<b>MIC-90-L</b> incl. all connectivity material	<b>304805</b>
<b>2x</b>	<b>MIA-EH120 easy screw</b> the original MIA-EH 90 from the package will remain unused	<b>304888</b>

3	Connector MIC-90-LH MI-90 fixed on MI-90	
4	Connector MIC-90-LH MI-90 fixed on MI-120	
5	Connector MIC-90-LH MI-120 fixed on MI-120	
Angle does not include all connectivity material		
1x	<b>MIC-90-LH</b>	<b>2048107</b>
Connectivity material ordered separately		
4x	<b>MIA-EH90 easy hand screw</b>	<b>304887</b>
4x	<b>MIA-TP serrated plate</b>	<b>305707</b>
4x	<b>M12-F-SL-WS ¾" lock nut</b>	<b>382897</b>

8	Connector MIC-C90-AA Concrete connector for MI-90	
1x	MIC-C90-AA connector Contains connectors and all through bolts	304825
Anchors		
2x	HST3-R M12x115 40/20	2105870

10	Connector MIC-C120-D Concrete connector for MI-120	
1x	<b>MIC-C120-D connector</b> Contains connector and all through bolts	<b>304829</b>
Anchors		
4x	<b>HST3-R M16x135 35/15</b>	<b>2105876</b>

9	Connector MIC-C90-D	
	Concrete connector for MI-90	
1x	<b>MIC-C90-D connector</b>	<b>304827</b>
	Contains connectors and all through bolts	
Anchors		
4x	<b>HST3-R M16x135 35/15</b>	<b>2105876</b>

11	Brackets MIC-C90-D	
	Concrete brackets	
Bracket (Cantilever arm)		
1x	MIC-C90-D-500	267789
	MIC-C90-D-750	267790
	MIC-C90-D-1000	267791
	MIC-C90-D-1500	267792
	MIC-C90-D-2000	267793
Anchors		
4x	HST3-R M16x135 35/15	2105876


12	Brackets MIC-C120-D Concrete brackets	
Bracket (Cantilever arm)		
1x	MIC-C120-D-500	270468
	MIC-C120-D-750	270469
	MIC-C120-D-1000	270470
	MIC-C120-D-1500	270471
	MIC-C120-D-2000	270472
Anchors		
4x	HST3-R M16x135 35/15	2105876

15	Plastic end cap MIA-EC-90 End cap for MI-90	
1x	MIA-EC-90 plastic endcap	432077

16	Plastic end cap MIA-EC-120 End cap for MI-120	
1x	MIA-EC-120 plastic endcap	432078

13	Girders	
	MI-90	
	MI-90 3m girder	304798
	MI-90 6m girder	304799

14	Girders	
	MI-120	
	MI-120 3m girder	304800
	MI-120 6m girder	304801

Application description	Application	Product lines	Base material
MI System - Ceiling Tree L,T On Concrete		MI System	Concrete
General comments		Clamps	
<ul style="list-style-type: none"> <li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li> </ul>		Accessories	

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MIQ System - Ceiling Tree L,T On Concrete - Options

13	Connector MQP-45-F for bracing with MQ channel		
1x	MQP-45-F brace connector	304164	
2x	MQN-HDG plus push button	387779	
1x	HST3-R M12x105 30/10	2105869	

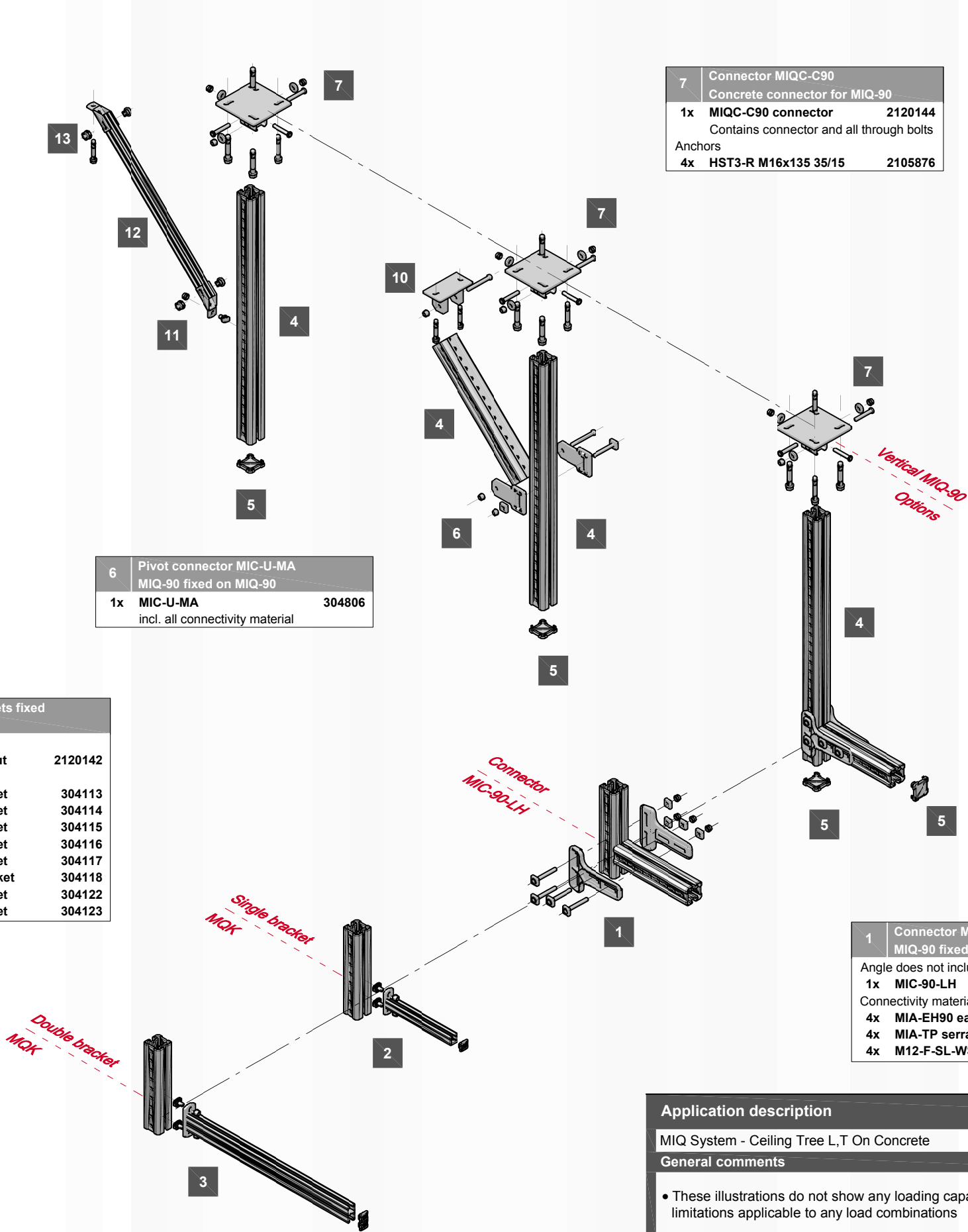
12	Bracing channel MQ channel		
1x	MQ-41-F 3m channel	304099	
	MQ-41-F 6m channel	304100	

11	Connector MQP-45-F for bracing with MQ channel		
1x	MQP-45-F brace connector	304164	
2x	MQN-HDG plus push button	387779	
1x	MIQA-T T-bolt (incl. nut)	2120142	

10	Base material pivot connector MIC-CU-MA		
1x	MIC-CU-MA		304828
	incl. all connectivity material		
Anchors			
2x	HST3-R M12x105 30/10		2105869

2	Single MQK-F brackets fixed to MIQ girder	
T-bolts		
2x	MIQA-T t-bolt incl. nut	2120142
MQK-F bracket		
1x	MQK-21/300-F bracket	304113
	MQK-21/450-F bracket	304114
	MQK-41/300-F bracket	304115
	MQK-41/450-F bracket	304116
	MQK-41/600-F bracket	304117
	MQK-41/1000-F bracket	304118
	MQK-72/450-F bracket	304122
	MQK-72/600-F bracket	304123

3	Double MQK-F brackets fixed to MIQ girder		
T-bolts			
2x	MIQA-T t-bolt incl. nut		2120142
MQK-F bracket			
1x	MQK-21 D/300-F bracket		304124
	MQK-21 D/450-F bracket		304125
	MQK-21 D/600-F bracket		304126
	MQK-41 D/1000-F bracket		304127




7	Connector MIQC-C90 Concrete connector for MIQ-90		
1x	MIQC-C90 connector	2120144	
Contains connector and all through bolts			
Anchors			
4x	HST3-R M16x135 35/15	2105876	

1	Connector MIC-90-LH MIQ-90 fixed on MIQ-90	
Angle does not include all connectivity material		
1x	MIC-90-LH	2048107
Connectivity material ordered separately		
4x	MIA-EH90 easy hand screw	304887
4x	MIA-TP serrated plate	305707
4x	M12-F-SL-WS ¾" lock nut	382897

4	Girders MI-90		
	MIQ-90 3m girder	2119866	
	MIQ-90 6m girder	2119867	

5	Plastic end cap MIA-EC-90 End cap for MIQ-90		
1x	MIA-EC-90 plastic endcap	432077	

Application description	Application	Product lines	Base material
MIQ System - Ceiling Tree L,T On Concrete		MIQ System	Concrete
General comments		Clamps	
<ul style="list-style-type: none"><li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>		Accessories	

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For all other combinations and rotations of the connectors, please see Ceiling tree L,T on concrete

Application description		Application		Product lines	Base material		
MI System - Ceiling Tree L,T On Steel			3	MI System	Steel		
General comments				Clamps			
<ul style="list-style-type: none"> <li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li> </ul>				Accessories			

# MI System - Ceiling Tree L,T On Steel - Clamped Beam Options - Vertical upright MI-120

**12** Clamping flange "Type A" upper brace connector

1x MIC-SA-MA connector	304815
Contains connector and all through bolts	
4x MI-SGC M12 beam clamp	233859

**11** Pivot connector MIC-U-MA MI-90 fixed on MI-120

1x MIC-U-MA	304806
incl. all connectivity material	

**13** Clamping flange "Type B" upper brace connector

1x MIC-SB-MA connector	304816
Contains connector and all through bolts	
4x MI-SGC M12 beam clamp	233859

**14** Clamping flange "Type C" upper brace connector

1x MIC-SC-MA connector	304817
Contains connector and all through bolts	
4x MI-SGC M12 beam clamp	233859

**1** Clamping flange "Type A" upper connector

1x MIC-S120-A connector	304818
Contains connector and all through bolts	
2x MI-SGC M12 beam clamp	233859

**2** Clamping flange "Type B" upper connector

1x MIC-S120-B connector	304819
Contains connector and all through bolts	
4x MI-SGC M12 beam clamp	233859

**3** Clamping flange "Type C" upper connector

1x MIC-S120-C connector	304820
Contains connector and all through bolts	
4x MI-SGC M12 beam clamp	233859

**6** Brackets MIC-S90-C "Type C" Steel brackets

Bracket (Cantilever arm)	
1x MIC-S120-C-500 bracket	270463
MIC-S120-C-750 bracket	270464
MIC-S120-C-1000 bracket	270465
MIC-S120-C-1500 bracket	270466
MIC-S120-C-2000 bracket	270467

**5** Brackets MIC-S120-B "Type B" Steel brackets

Bracket (Cantilever arm)	
1x MIC-S120-B-500 bracket	267799
MIC-S120-B-750 bracket	270459
MIC-S120-B-1000 bracket	270460
MIC-S120-B-1500 bracket	270461
MIC-S120-B-2000 bracket	270462

**4** Brackets MIC-S120-A "Type A" Steel brackets

Bracket (Cantilever arm)	
1x MIC-S120-A-500 bracket	267794
MIC-S120-A-750 bracket	267795
MIC-S120-A-1000 bracket	267796
MIC-S120-A-1500 bracket	267797
MIC-S120-A-2000 bracket	267798

**7** Girders MI-90

MI-90 3m girder	304798
MI-90 6m girder	304799

**8** Girders MI-120

MI-120 3m girder	304800
MI-120 6m girder	304801

**9** Plastic end cap MIA-EC-90 end cap

1x MIA-EC-90 plastic endcap	432077
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**10** Plastic end cap MIA-EC-120 end cap

1x MIA-EC-120 plastic endcap	432078
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For all other combinations and rotations of the connectors, please see Ceiling tree L,T on concrete

**Application description**

MI System - Ceiling Tree L,T On Steel

**General comments**

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

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Application	Product lines	Base material
	MI System	Steel
	Clamps	
	Accessories	

# MIQ System - Ceiling Tree L,T On Steel - Boxed Beam Options - Vertical upright MIQ-90

15	Clamping flange "Type A" upper brace connector	
1x	MIC-SA-MA connector	304815
	Contains connector and all through bolts	
1x	MIB-SA base plate	304821
4x	AM12x1000-HDG 8.8 th. rod	419103
	threaded rods reflecting structural beam size	
8x	M12-F-SL WS ¾ lock nut	382897

6	Pivot connector MIC-U-MA MIQ-90 fixed on MIQ-90	
1x	MIC-U-MA	304806
	incl. all connectivity material	

1	Connector MIC-90-LH MIQ-90 fixed on MIQ-90	
	Angle does not include all connectivity material	
1x	MIC-90-LH	2048107
	Connectivity material ordered separately	
4x	MIA-EH90 easy hand screw	304887
4x	MIA-TP serrated plate	305707
4x	M12-F-SL-WS ¾" lock nut	382897

2	Single MQK-F brackets fixed to MIQ girder	
	T-bolts	
2x	MIQA-T t-bolt incl. nut	2120142
	MQK-F bracket	
1x	MQK-21/300-F bracket	304113
	MQK-21/450-F bracket	304114
	MQK-41/300-F bracket	304115
	MQK-41/450-F bracket	304116
	MQK-41/600-F bracket	304117
	MQK-41/1000-F bracket	304118
	MQK-72/450-F bracket	304122
	MQK-72/600-F bracket	304123
	Plastic endcaps (depends on size of channel)	
	MQZ-E21 endcap	370598
	MQZ-E31 endcap	369686
	MQZ-E41 endcap	369685

3	Double MQK-F brackets fixed to MIQ girder	
	T-bolts	
2x	MIQA-T t-bolt incl. nut	2120142
	MQK-F bracket	
1x	MQK-21 D/300-F bracket	304124
	MQK-21 D/450-F bracket	304125
	MQK-21 D/600-F bracket	304126
	MQK-41 D/1000-F bracket	304127
	Plastic endcaps (depends on size of channel)	
	MQZ-E21 endcap	370598
	MQZ-E41 endcap	369685

16	Clamping flange "Type B" upper brace connector	
1x	MIC-SB-MA connector	304816
	Contains connector and all through bolts	
1x	MIB-SB base plate	304822
4x	AM12x1000-HDG 8.8 th. rod	419103
	threaded rods reflecting structural beam size	
8x	M12-F-SL WS ¾ lock nut	382897

11	Boxing flange "Type B" upper connector Steel beam parallel to trapeze	
12	Boxing web "Type B" upper connector Steel beam parallel to trapeze	
1x	MIQC-S90-BP connector	2120273
	Contains connector and all through bolts	
1x	MIQB-SB base plate	2123566
4x	AM12x1000-HDG 8.8 th. rod	419103
	threaded rods reflecting structural beam size	
8x	M12-F-SL WS ¾ lock nut	382897

13	Boxing flange "Type B" upper connector Steel beam perpendicular to trapeze	
14	Boxing web "Type B" upper connector Steel beam perpendicular to trapeze	
1x	MIQC-S90-BC connector	2120272
	Contains connector and all through bolts	
1x	MIQB-SB base plate	2123566
4x	AM12x1000-HDG 8.8 th. rod	419103
	threaded rods reflecting structural beam size	
8x	M12-F-SL WS ¾ lock nut	382897

9	Boxing flange "Type A" upper connector Steel beam perpendicular to trapeze	
10	Boxing web "Type A" upper connector Steel beam perpendicular to trapeze	
1x	MIQC-S90-AC connector	2120270
	Contains connector and all through bolts	
1x	MIQB-SA base plate	2123565
4x	AM12x1000-HDG 8.8 th. rod	419103
	threaded rods reflecting structural beam size	
8x	M12-F-SL WS ¾ lock nut	382897

7	Boxing flange "Type A" upper connector Steel beam parallel to trapeze	
8	Boxing web "Type A" upper connector Steel beam parallel to trapeze	
1x	MIQC-S90-AP connector	2120271
	Contains connector and all through bolts	
1x	MIQB-SA base plate	2123565
4x	AM12x1000-HDG 8.8 th. rod	419103
	threaded rods reflecting structural beam size	
8x	M12-F-SL WS ¾ lock nut	382897

4	Girders MI-90	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

5	Plastic end cap MIA-EC-90 End cap for MIQ-90	
1x	MIA-EC-90 plastic endcap	432077

## Application description

MIQ System - Ceiling Tree L,T On Steel

## General comments

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## Application

## Product lines

## Base material

3

MIQ System

Steel

Clamps

Accessories

MIQ System - Ceiling Tree L,T On Steel - Clamped Beam Options - Vertical upright MIQ-90

12

Clamping flange "Type B" upper  
brace connector

1x MIC-SB-MA connector 304816  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

11

Clamping flange "Type A" upper  
brace connector

1x MIC-SA-MA connector 304815  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

6

Pivot connector MIC-U-MA  
MIQ-90 fixed on MIQ-90

1x MIC-U-MA 304806  
incl. all connectivity material

2

Single MQK-F brackets fixed  
to MIQ girder

T-bolts  
2x MIQA-T t-bolt incl. nut 2120142  
MQK-F bracket  
1x MQK-21/300-F bracket 304113  
MQK-21/450-F bracket 304114  
MQK-41/300-F bracket 304115  
MQK-41/450-F bracket 304116  
MQK-41/600-F bracket 304117  
MQK-41/1000-F bracket 304118  
MQK-72/450-F bracket 304122  
MQK-72/600-F bracket 304123  
Plastic endcaps (depends on size of channel)  
MQZ-E21 endcap 370598  
MQZ-E31 endcap 369686  
MQZ-E41 endcap 369685

3

Double MQK-F brackets fixed  
to MIQ girder

T-bolts  
2x MIQA-T t-bolt incl. nut 2120142  
MQK-F bracket  
1x MQK-21 D/300-F bracket 304124  
MQK-21 D/450-F bracket 304125  
MQK-21 D/600-F bracket 304126  
MQK-41 D/1000-F bracket 304127  
Plastic endcaps (depends on size of channel)  
MQZ-E21 endcap 370598  
MQZ-E41 endcap 369685

9

Clamping flange "Type B" connector  
Steel beam parallel to trapeze

1x MIQC-S90-BP connector 2120273  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

10

Clamping flange "Type B" connector  
Steel beam perpendicular to trapeze

1x MIQC-S90-BC connector 2120272  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

7

Clamping flange "Type A" connector  
Steel beam parallel to trapeze

1x MIQC-S90-AP connector 2120271  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

8

Clamping flange "Type A" connector  
Steel beam perpendicular to trapeze

1x MIQC-S90-AC connector 2120270  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

4

Girders  
MI-90

MIQ-90 3m girder 2119866  
MIQ-90 6m girder 2119867

5

Plastic end cap MIA-EC-90  
End cap for MIQ-90

1x MIA-EC-90 plastic endcap 432077

1

Connector MIC-90-LH  
MIQ-90 fixed on MIQ-90

Angle does not include all connectivity material  
1x MIC-90-LH 2048107  
Connectivity material ordered separately  
4x MIA-EH90 easy hand screw 304887  
4x MIA-TP serrated plate 305707  
4x M12-F-SL-WS 3/4" lock nut 382897

1

Connector MIC-90-LH  
MIQ-90 fixed on MIQ-90

Angle does not include all connectivity material  
1x MIC-90-LH 2048107  
Connectivity material ordered separately  
4x MIA-EH90 easy hand screw 304887  
4x MIA-TP serrated plate 305707  
4x M12-F-SL-WS 3/4" lock nut 382897

Application description

MIQ System - Ceiling Tree L,T On Steel

General comments

• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application

3

MIQ System

Clamps

Accessories

Product lines

MIQ System

Clamps

Accessories

Base material

Steel

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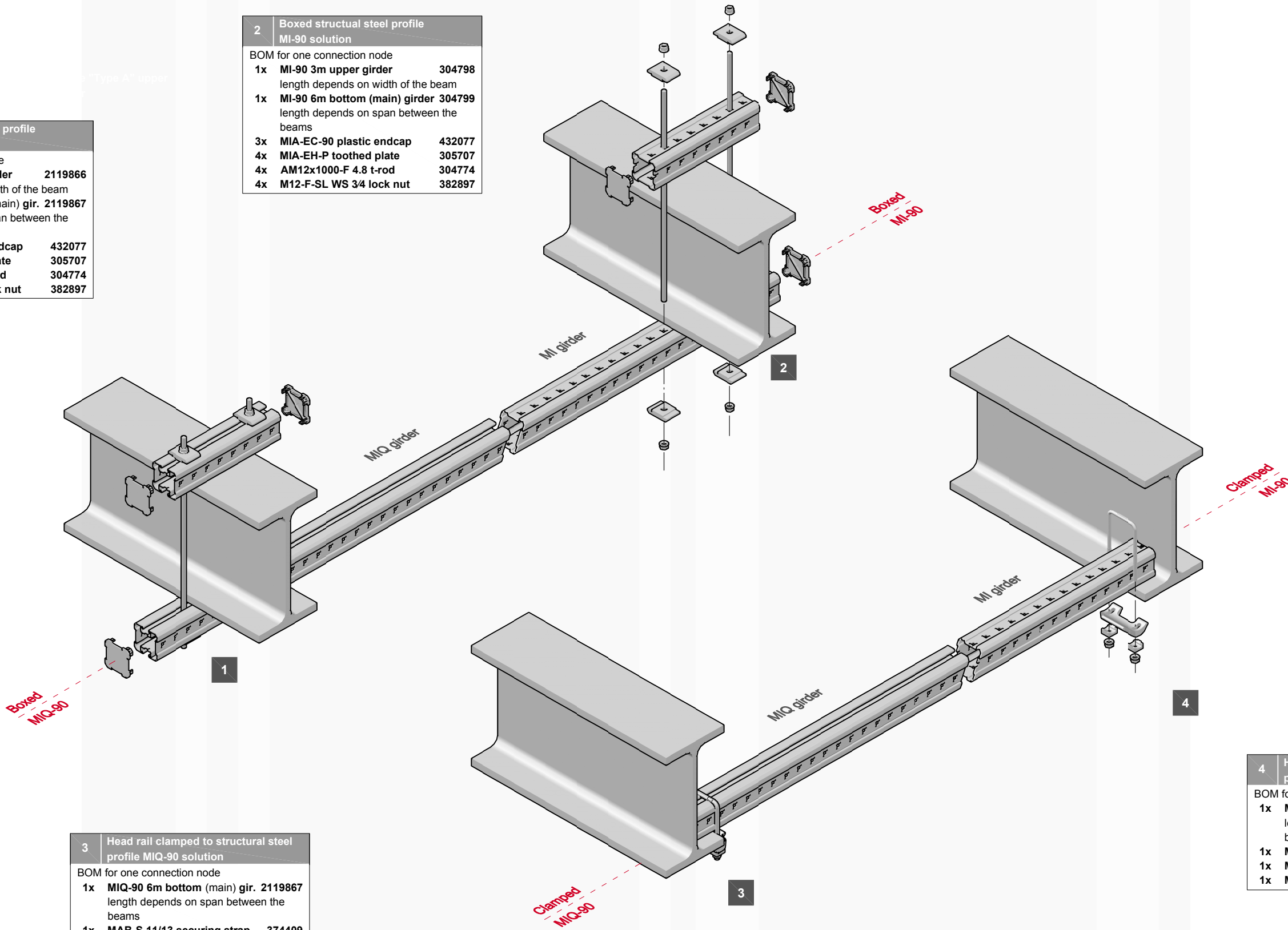


MI/MIQ System - Head Rail On Steel - Options

MI-90/MIQ-90 Options

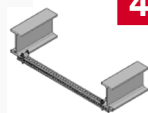
1	Boxed structural steel profile	MIQ-90 solution
BOM for one connection node		
1x	MIQ-90 3m upper girder	2119866
length depends on width of the beam		
1x	MIQ-90 6m bottom (main) gir.	2119867
length depends on span between the beams		
3x	MIA-EC-90 plastic endcap	432077
4x	MIA-EH-P toothed plate	305707
4x	AM12x1000-F 4.8 t-rod	304774
4x	M12-F-SL WS 3/4 lock nut	382897

2	Boxed structural steel profile	MI-90 solution
BOM for one connection node		
1x	MI-90 3m upper girder	304798
length depends on width of the beam		
1x	MI-90 6m bottom (main) girder	304799
length depends on span between the beams		
3x	MIA-EC-90 plastic endcap	432077
4x	MIA-EH-P toothed plate	305707
4x	AM12x1000-F 4.8 t-rod	304774
4x	M12-F-SL WS 3/4 lock nut	382897



3	Head rail clamped to structural steel profile	MIQ-90 solution
BOM for one connection node		
1x	MIQ-90 6m bottom (main) gir.	2119867
length depends on span between the beams		
1x	MAB-S 11/13 securing strap	374409
1x	MI-DGC 90 beam clamp	233860
1x	MIA-EC-90 plastic endcap	432077

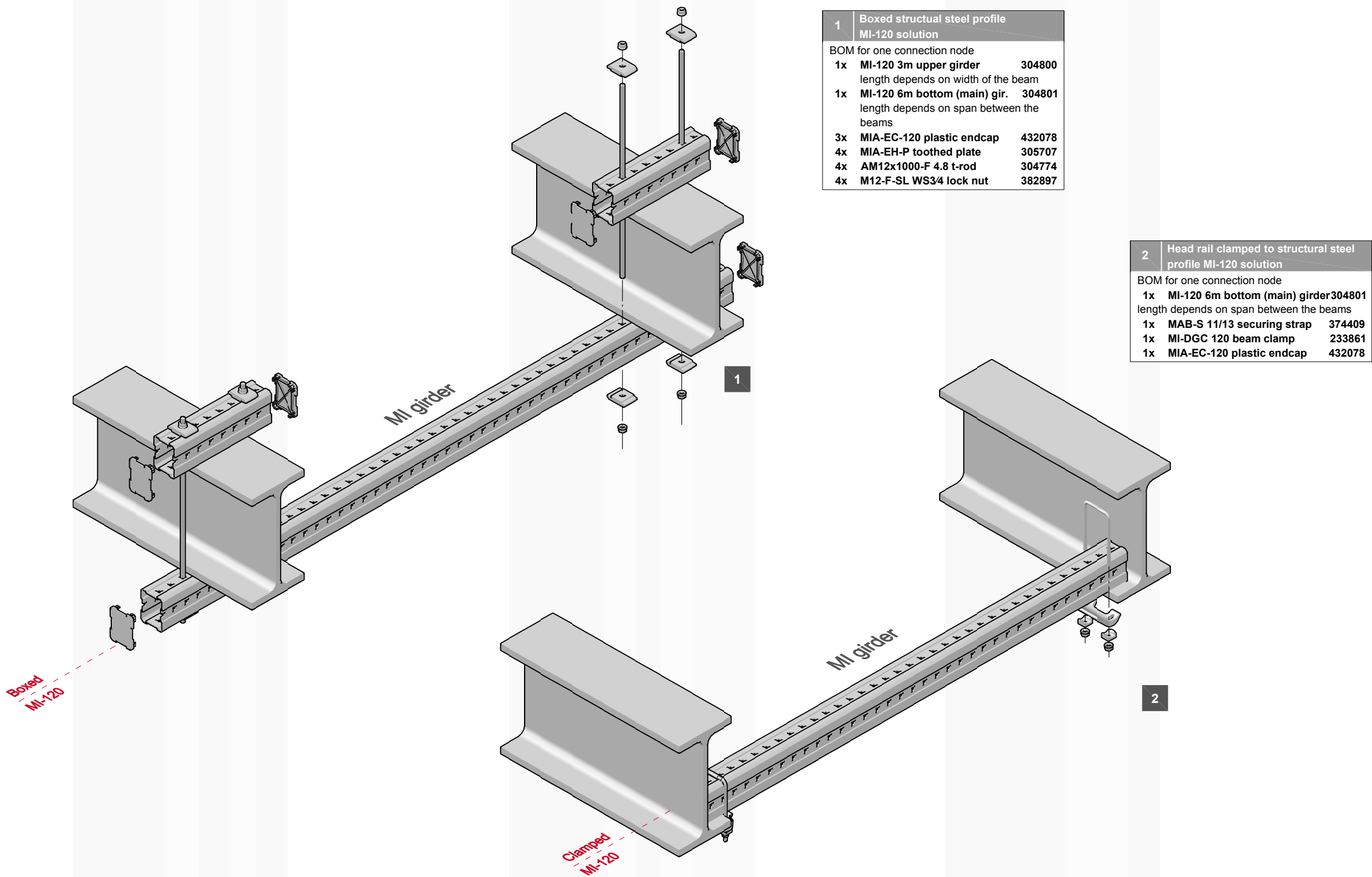
4	Head rail clamped to structural steel profile	MI-90 solution
BOM for one connection node		
1x	MI-90 6m bottom (main) girder	304799
length depends on span between the beams		
1x	MAB-S 11/13 securing strap	374409
1x	MI-DGC 90 beam clamp	233860
1x	MIA-EC-90 plastic endcap	432077

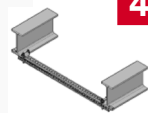
Application description		Application	Product lines	Base material
MI/MIQ System - Head Rail On Steel			MI/MIQ System	Steel
General comments			Clamps	
<ul style="list-style-type: none"><li>• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>			Accessories	

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# MI System - Head Rail On Steel - Options

## MI-120 Options



Application description		Application	Product lines	Base material
MI System - Head Rail On Steel		 <div>4</div>	MI System	Steel
General comments			Clamps	
<ul style="list-style-type: none"><li>• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>			Accessories	

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MI System - Ceiling 3D Cube On Concrete - Options

Horizontal MI-90 Options

6	Connector MIC-90-U MI-90 fixed on MI-90
7	Connector MIC-90-U MI-90 fixed on MI-90
1x	<b>MIC-90-U connector</b> <b>304803</b> Contains connectors, all through bolts, back plate and lock nut

1	Connector MIC-C90-D Concrete connector for MI-90
1x	<b>MIC-C90-D connector</b> <b>304827</b> Contains connector and all through bolts
Anchors	
4x	<b>HST3-R M16x135 35/15</b> <b>2105876</b>

2	Connector MIC-C90-AA Concrete connector for MI-90
3	Connector MIC-C90-AA Concrete connector for MI-90
1x	<b>MIC-C90-AA connector</b> <b>304825</b> contains connectors and all through bolts
Anchors	
2x	<b>HST3-R M12x115 40/20</b> <b>2105870</b>

5	Brackets MIC-C90-D for concrete Bracket instead of vertical upright and base conn.
1x	<b>MIC-C90-D-500</b> <b>267789</b>
	<b>MIC-C90-D-750</b> <b>267790</b>
	<b>MIC-C90-D-1000</b> <b>267791</b>
	<b>MIC-C90-D-1500</b> <b>267792</b>
	<b>MIC-C90-D-2000</b> <b>267793</b>
Anchors	
4x	<b>HST3-R M16x135 35/15</b> <b>2105876</b>

8	Plastic end cap MIA-EC-90 End cap for MIQ-90
1x	<b>MIA-EC-90 plastic endcap</b> <b>432077</b>

9	Girders MI-90
	<b>MI-90 3m girder</b> <b>304798</b>
	<b>MI-90 6m girder</b> <b>304799</b>

Application description	Application	Product lines	Base material
MI System - Ceiling 3D Cube On Concrete		MI System	Concrete
General comments		Accessories	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations			

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MI System - Ceiling 3D Cube On Concrete - Options

Horizontal MI-120 Options

1 Connector MIC-C90-D  
Concrete connector for MI-90

1x MIC-C90-D connector 304827  
Contains connector and all through bolts

Anchors  
4x HST3-R M16x135 35/15 2105876

2 Connector MIC-C90-AA  
Concrete connector for MI-90

3 Connector MIC-C90-AA  
Concrete connector for MI-90

1x MIC-C90-AA connector 304825  
contains connectors and all through bolts

Anchors  
2x HST3-R M12x115 40/20 2105870

5 Connector MIC-120-U  
MI-120 fixed on MI-90

6 Connector MIC-120-U  
MI-120 fixed on MI-90

1x MIC-120-U connector 304804  
Contains connectors, all through bolts,  
back plate and lock nut

7 Plastic end cap MIA-EC-90  
End cap for MIQ-90

1x MIA-EC-90 plastic endcap 432077

8 Girders  
MI-90  
MI-90 3m girder 304798  
MI-90 6m girder 304799

9 Girders  
MI-120  
MI-120 3m girder 304800  
MI-120 6m girder 304801

4 Brackets MIC-C90-D for concrete  
Bracket instead of vertical upright and base conn.

1x MIC-C90-D-500 267789  
MIC-C90-D-750 267790  
MIC-C90-D-1000 267791  
MIC-C90-D-1500 267792  
MIC-C90-D-2000 267793

Anchors  
4x HST3-R M16x135 35/15 2105876

Connector MIC-C90-D

Connector MIC-C90-AA

Bracket MIC-C90-D-L


**Application description**

MI System - Ceiling 3D Cube On Concrete

**General comments**

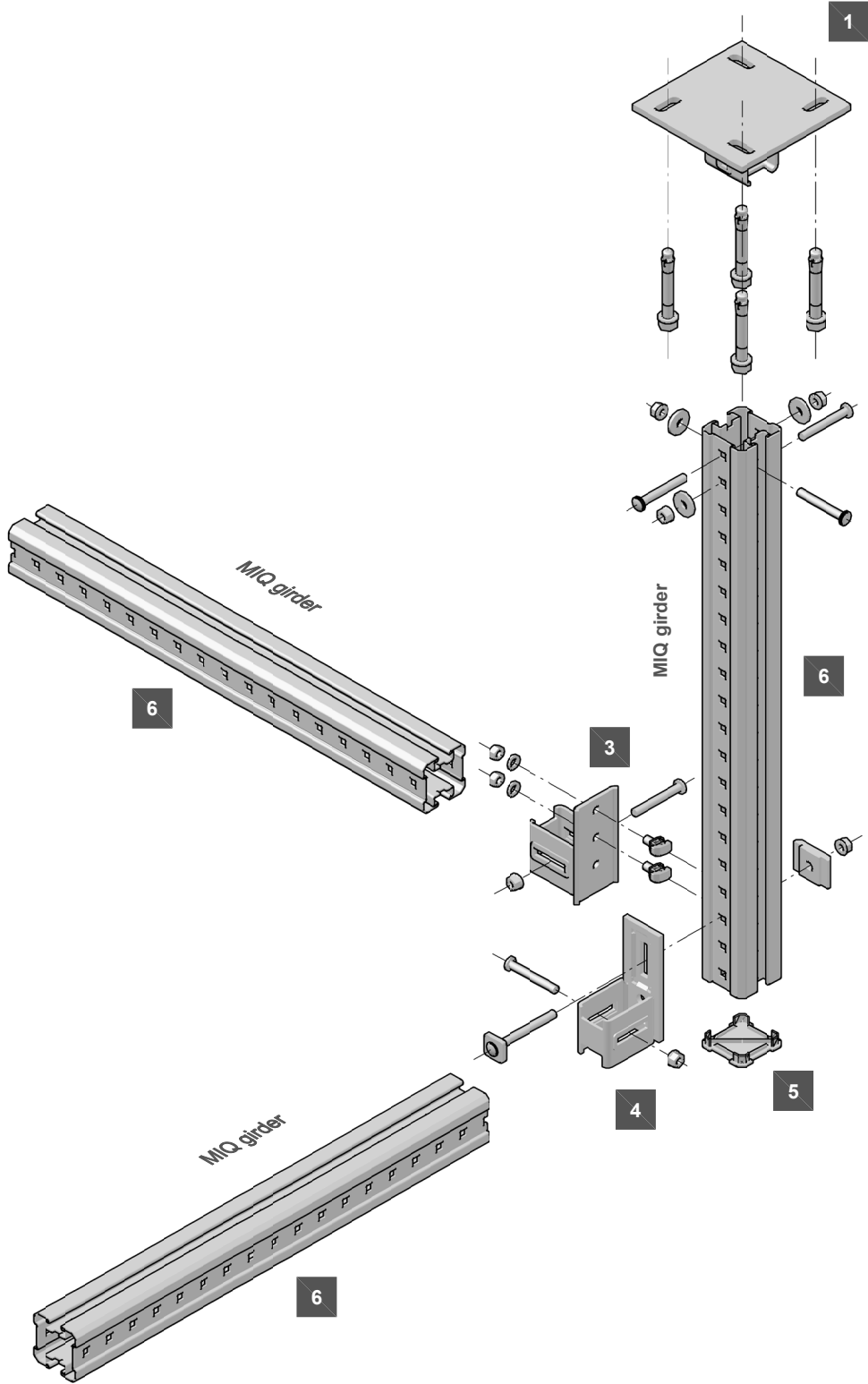
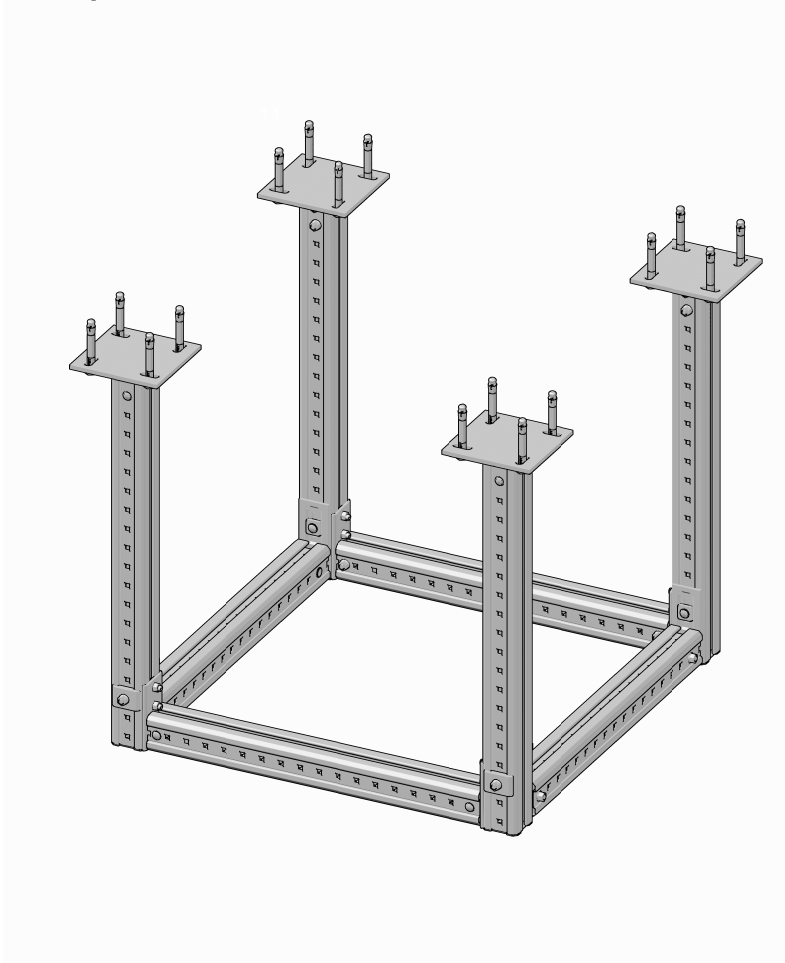
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Application	Product lines	Base material
 <b>5</b>	MI System	Concrete
	Accessories	

# MIQ System - Ceiling 3D Cube On Concrete - Options

## MIQ-90 Options



1	Connector MIQC-C90 Concrete connector for MIQ-90	
1x	MIQC-C90 connector	2120144
Contains connector and all through bolts		
Anchors		
4x	HST3-R M16x135 35/15	2105876

3	Connector MIQC-90-HT MIQ-90 fixed on MIQ-90	
1x	MIQC-90-HT connector	2123881
contains connectors and all through bolts		

4	Connector MIQC-90-MI MIQ-90 fixed on rotated MIQ-90	
1x	MIQC-90-MI connector	2140257
contains connectors and all through bolts		

5	Plastic end cap MIA-EC-90 End cap for MIQ-90	
1x	MIA-EC-90 plastic endcap	432077

6	Girders MIQ-90	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

### Application description

MIQ System - Ceiling 3D Cube On Concrete

### General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

### Application



### Product lines

MIQ System  
Accessories

### Base material

Concrete

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MI/MIQ System - Ceiling 3D Cube On Concrete - Options

Horizontal MIQ-90 Options

1	Connector MIC-C90-D Concrete connector for MI-90
1x	<b>MIC-C90-D connector</b> <b>304827</b>
Contains connector and all through bolts	
Anchors	
4x	<b>HST3-R M16x135 35/15</b> <b>2105876</b>

2	Connector MIC-C90-AA Concrete connector for MI-90
3	Connector MIC-C90-AA Concrete connector for MI-90
1x	<b>MIC-C90-AA connector</b> <b>304825</b>
contains connectors and all through bolts	
Anchors	
2x	<b>HST3-R M12x115 40/20</b> <b>2105870</b>


6	Connector MIQC-90-MI MIQ-90 fixed on MI-90
7	Connector MIQC-90-MI MIQ-90 fixed on MI-90
1x	<b>MIQC-90-MI connector</b> <b>2140257</b>
Contains connectors, all through bolts, back plate and lock nut	

5	Brackets MIC-C90-D for concrete Bracket instead of vertical upright and base conn.
1x	<b>MIC-C90-D-500</b> <b>267789</b>
	<b>MIC-C90-D-750</b> <b>267790</b>
	<b>MIC-C90-D-1000</b> <b>267791</b>
	<b>MIC-C90-D-1500</b> <b>267792</b>
	<b>MIC-C90-D-2000</b> <b>267793</b>
Anchors	
4x	<b>HST3-R M16x135 35/15</b> <b>2105876</b>

8	Plastic end cap MIA-EC-90 End cap for MIQ-90
1x	<b>MIA-EC-90 plastic endcap</b> <b>432077</b>

9	Girders MIQ-90
	<b>MIQ-90 3m girder</b> <b>2119866</b>
	<b>MIQ-90 6m girder</b> <b>2119867</b>

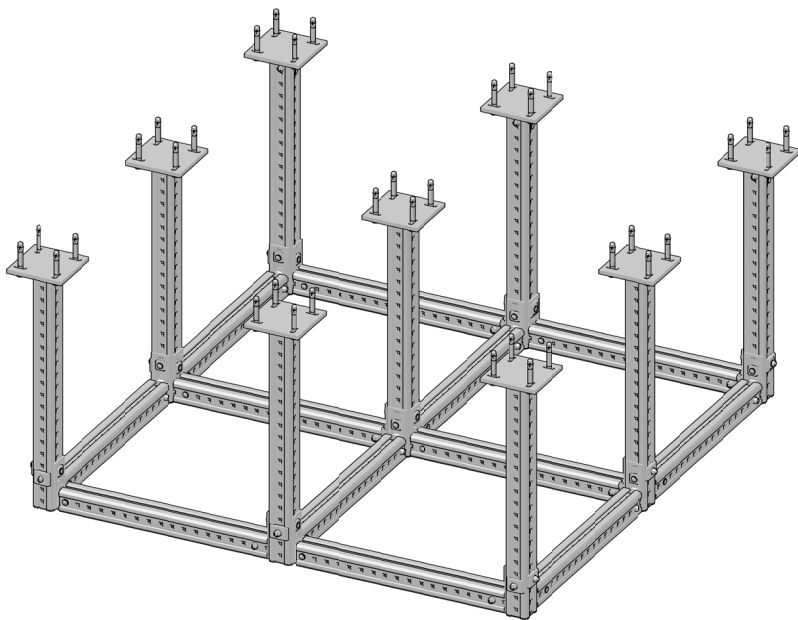
10	Girders MI-90
	<b>MI-90 3m girder</b> <b>304798</b>
	<b>MI-90 6m girder</b> <b>304799</b>

Application description	Application	Product lines	Base material
MI/MIQ System - Ceiling 3D Cube On Concrete		MI System	Concrete
General comments		Accessories	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations			

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MI/MIQ System - Ceiling 3D Cube On Concrete - Options

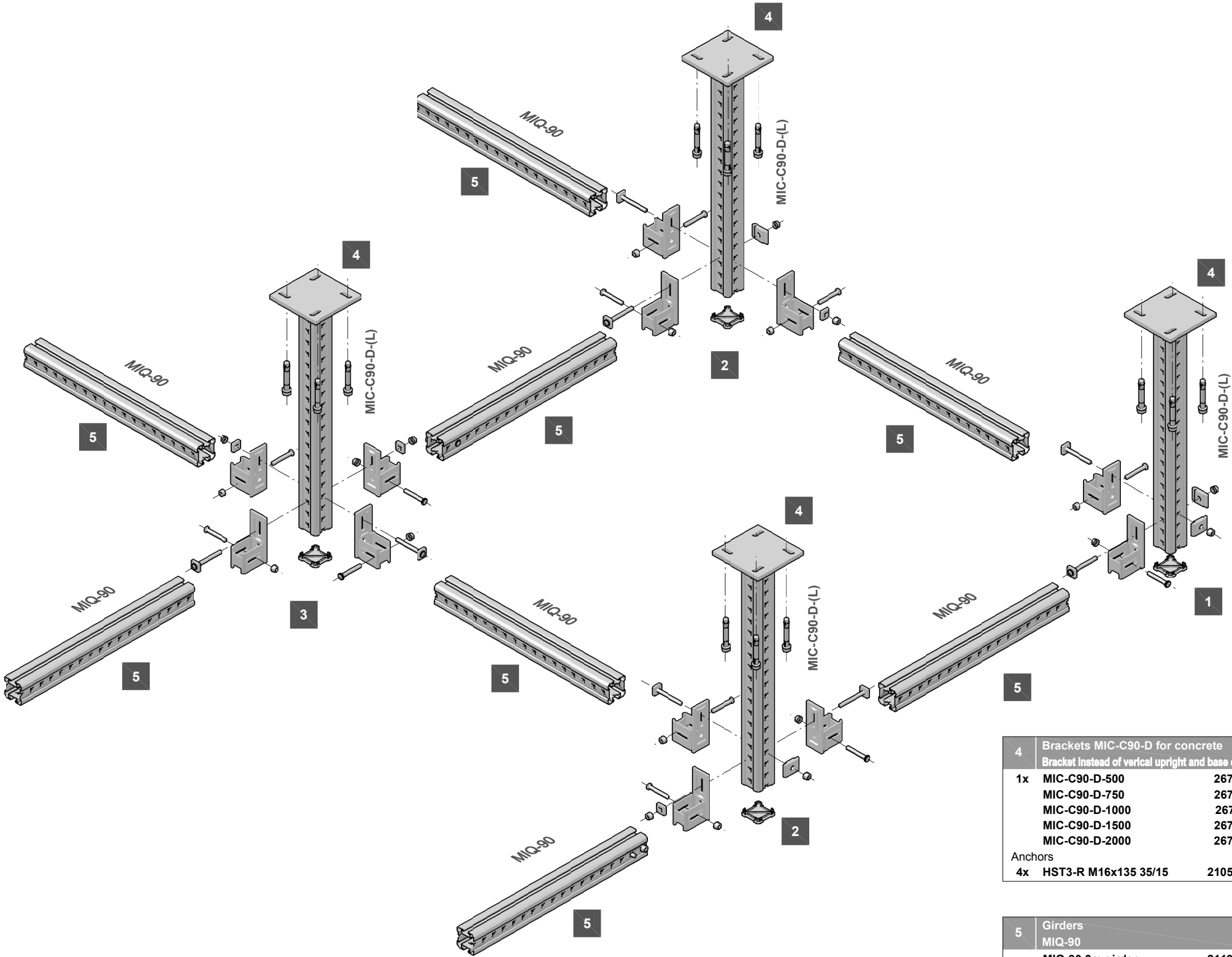
Horizontal MIQ-90 Options



1	Node with 2 girders - corner MIQ-90 fixed on MIC-C90 bracket	
2x	MIQ-90 girder	Various
1x	MIC-C90 bracket	Various
2x	MIQC-90-MI connector	2140257
	incl. all connectivity material	
1x	MIA-EC-90 plastic endcap	432077


2	Node with 3 girders MIQ-90 fixed on MIC-C90 bracket	
3x	MIQ-90 girder	Various
1x	MIC-C90 bracket	Various
3x	MIQC-90-MI connector	2140257
	1x MIA-EH90 + 2x MIA-EH-P + 1x M12-F-SL-WS 3/4" will remain unused	
1x	MIA-TP toothed plate	305707
1x	MIA-EC-90 plastic endcap	432077

3	Node with 4 girders MIQ-90 fixed on MIC-C90 bracket	
4x	MIQ-90 girder	Various
1x	MIC-C90 bracket	Various
4x	MIQC-90-MI connector	2140257
	2x MIA-EH90 + 4x MIA-EH-P + 2x M12-F-SL-WS 3/4" will remain unused	
2x	MIA-TP toothed plate	305707
1x	MIA-EC-90 plastic endcap	432077



4	Brackets MIC-C90-D for concrete Bracket instead of vertical upright and base conn.	
1x	MIC-C90-D-500	267789
	MIC-C90-D-750	267790
	MIC-C90-D-1000	267791
	MIC-C90-D-1500	267792
	MIC-C90-D-2000	267793
Anchors		
4x	HST3-R M16x135 35/15	2105876

5	Girders MIQ-90	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

Application description	Application	Product lines	Base material
MI/MIQ System - Ceiling 3D Cube On Concrete	 5	MI/MIQ System	Concrete
General comments		Accessories	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations			

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MI System - Bracket (Cantilever Arm) On Concrete - Options

1	Brackets MIC-C90-D Concrete brackets	
Bracket (Cantilever arm)		
1x	MIC-C90-D-500	267789
	MIC-C90-D-750	267790
	MIC-C90-D-1000	267791
	MIC-C90-D-1500	267792
	MIC-C90-D-2000	267793
Anchors		
4x	HST3-R M16x135 35/15	2105876

3	Girders MI-90	
1x	MI-90 3m girder	304798
	MI-90 6m girder	304799

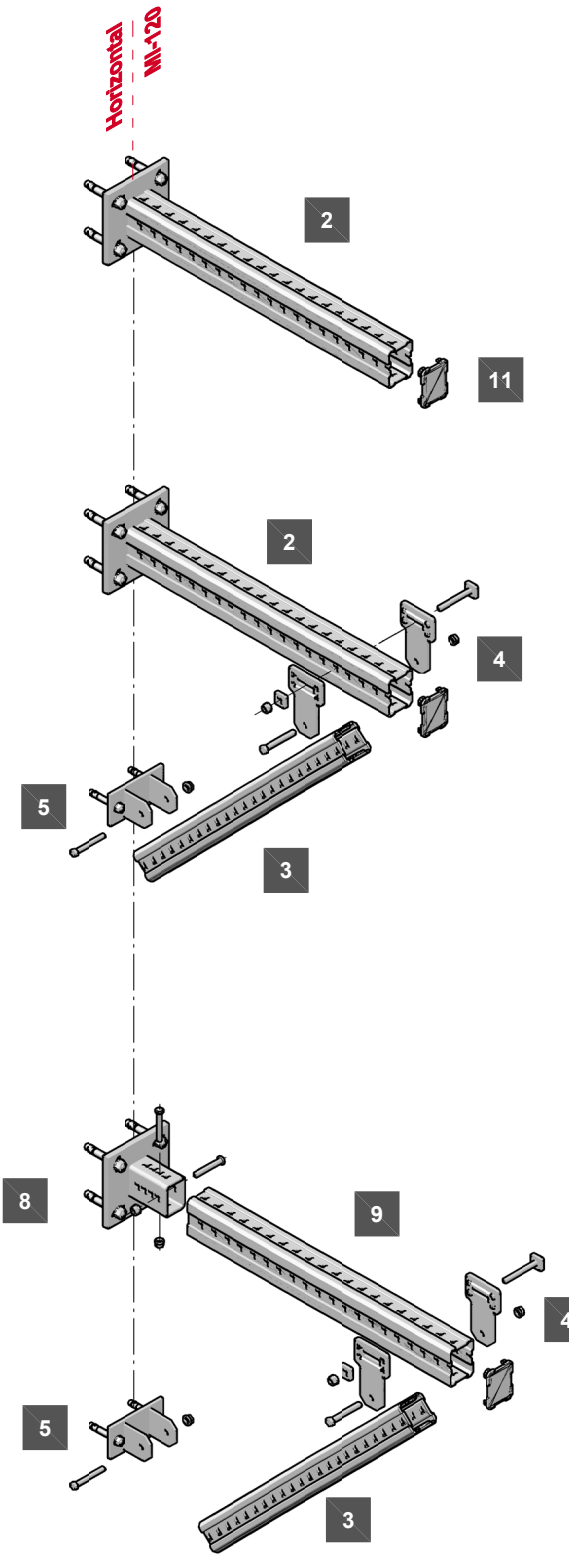
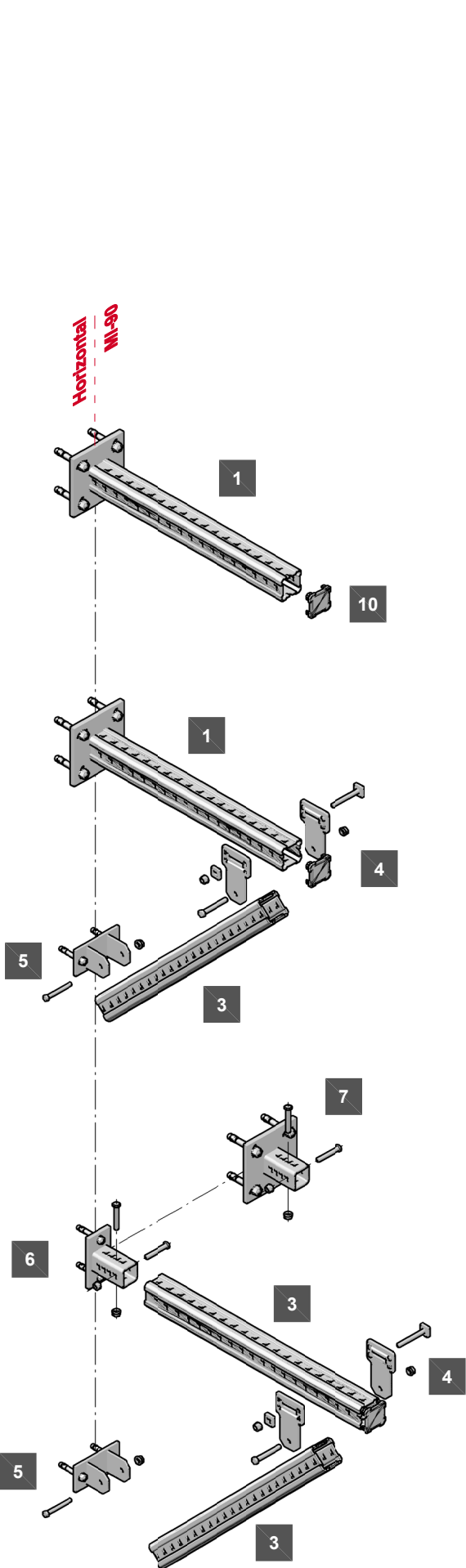
4	Pivot connector MIC-U-MA MI-90 fixed on MI-90	
1x	MIC-U-MA incl. all connectivity material	304806

5	Base material pivot connector MIC-CU-MA MI-90 fixed on MI-90	
1x	MIC-CU-MA	304828
incl. all connectivity material		
Anchors		
2x	HST3-R M12x115 40/20	2105870

6	Connector MIC-C90-AA Concrete connector for MI-90	
1x	MIC-C90-AA connector	304825
Contains connectors and all through bolts		
Anchors		
2x	HST3-R M12x115 40/20	2105870

7	Connector MIC-C90-D	
	Concrete connector for MI-90	
1x	MIC-C90-D connector	304827
Contains connectors and all through bolts		
Anchors		
4x	HST3-R M16x135 35/15	2105876

10	Plastic end cap MIA-EC-90 End cap for MI-90	
1x	MIA-EC-90 plastic endcap	432077



2	Brackets MIC-C120-D Concrete brackets	
Bracket (Cantilever arm)		
1x	MIC-C120-D-500	270468
	MIC-C120-D-750	270469
	MIC-C120-D-1000	270470
	MIC-C120-D-1500	270471
	MIC-C120-D-2000	270472
Anchors		
4x	HST3-R M16x135 35/15	2105876

3	Girders MI-90	
1x	MI-90 3m girder	304798
	MI-90 6m girder	304799

4	Pivot connector MIC-U-MA MI-90 fixed on MI-90	
1x	MIC-U-MA incl. all connectivity material	304806

5	Base material pivot connector MIC-CU-MA MI-90 fixed on MI-90	
1x	MIC-CU-MA	304828
incl. all connectivity material		
Anchors		
2x	HST3-R M12x115 40/20	2105870

8	Connector MIC-C120-D Concrete connector for MI-120	
1x	MIC-C120-D connector	304829
Contains connector and all through bolts		
Anchors		
4x	HST3-R M16x135 35/15	2105876

9	Girders MI-120	
1x	MI-120 3m girder	304800
	MI-120 6m girder	304801

11	Plastic end cap MIA-EC-120 End cap for MI-120	
1x	MIA-EC-120 plastic endcap	432078

Application description

MI System - Bracket (Cantilever Arm) On Concrete

General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application



Product lines

MI System  
Anchors  
Accessories

Base material

Concrete

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MIQ System - Bracket (Cantilever Arm) On Concrete - Options


1	Connector MIQC-C90 Concrete connector for MIQ-90		
1x	MIQC-C90 connector	2120144	Contains connector and all through bolts Anchors
4x	HST3-R M16x135 35/15	2105876	

3	Base material pivot connector MIC-CU-MA		
1x	MIC-CU-MA	304828	incl. all connectivity material Anchors
2x	HST3-R M12x105 30/10	2105869	

2	Pivot connector MIC-U-MA MIQ-90 fixed on MIQ-90		
1x	MIC-U-MA	304806	incl. all connectivity material

5	Girders MI-90		
	MIQ-90 3m girder	2119866	
	MIQ-90 6m girder	2119867	

6	Plastic end cap MIA-EC-90 End cap for MIQ-90		
1x	MIA-EC-90 plastic endcap	432077	

Application description	Application	Product lines	Base material
MIQ System - Bracket (Cantilever Arm) On Concrete		MIQ System	Concrete
General comments		Anchors	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations		Accessories	

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# MI System - Bracket (Cantilever Arm) On Steel - Boxed Beam Options - Horizontal upper MI-90

1	Boxing flange "Type A" upper connector	
2	Boxing web "Type A" upper connector	
1x	MIC-S90-A connector	304812
Contains connector and all through bolts		
1x	MIB-SA base plate	304821
4x	AM12x1000-HDG 8.8 th. rod	419103
threaded rods reflecting structural beam size		
8x	M12-F-SL WS ¾ lock nut	382897

3	Boxing flange "Type B" upper connector	
4	Boxing web "Type B" upper connector	
1x	MIC-S90-B connector	304813
Contains connector and all through bolts		
1x	MIB-SB base plate	304822
4x	AM12x1000-HDG 8.8 th. rod	419103
threaded rods reflecting structural beam size		
8x	M12-F-SL WS ¾ lock nut	382897

5	Boxing flange "Type C" upper connector	
6	Boxing web "Type C" upper connector	
1x	MIC-S90-C connector	304814
Contains connector and all through bolts		
1x	MIB-SC base plate	304823
4x	AM12x1000-HDG 8.8 th. rod	419103
threaded rods reflecting structural beam size		
8x	M12-F-SL WS ¾ lock nut	382897

7	Brackets MIC-S90-A "Type A"	
Steel brackets		
Bracket (Cantilever arm)		
1x	MIC-S90-A-500 bracket	267774
	MIC-S90-A-750 bracket	267775
	MIC-S90-A-1000 bracket	267776
	MIC-S90-A-1500 bracket	267777
	MIC-S90-A-2000 bracket	267778

8	Brackets MIC-S90-B "Type B"	
Steel brackets		
Bracket (Cantilever arm)		
1x	MIC-S90-B-500 bracket	267779
	MIC-S90-B-750 bracket	267780
	MIC-S90-B-1000 bracket	267781
	MIC-S90-B-1500 bracket	267782
	MIC-S90-B-2000 bracket	267783

9	Brackets MIC-S90-C "Type C"	
Steel brackets		
Bracket (Cantilever arm)		
1x	MIC-S90-C-500 bracket	267784
	MIC-S90-C-750 bracket	267785
	MIC-S90-C-1000 bracket	267786
	MIC-S90-C-1500 bracket	267787
	MIC-S90-C-2000 bracket	267788

12	Boxing flange "Type B" bottom brace connector	
13	Boxing web "Type B" bottom brace connector	
1x	MIC-SB-MA connector	304816
Contains connector and all through bolts		
1x	MIB-SB base plate	304822
4x	AM12x1000-HDG 8.8 th. rod	419103
threaded rods reflecting structural beam size		
8x	M12-F-SL WS ¾ lock nut	382897

10	Boxing flange "Type A" bottom brace connector	
11	Boxing web "Type A" bottom brace connector	
1x	MIC-SA-MA connector	304815
Contains connector and all through bolts		
1x	MIB-SA base plate	304821
8x	M12-F-SL WS¾ lock nut	382897
Threaded rods reflecting structural beam size		
4x	AM12x1000-F 4.8 t-rod	304774
	AM12x2000-F 4.8 t-rod	304775

14	Boxing flange "Type C" bottom brace connector	
15	Boxing web "Type C" bottom brace connector	
1x	MIC-SC-MA connector	304817
Contains connector and all through bolts		
1x	MIB-SC base plate	304823
4x	AM12x1000-HDG 8.8 th. rod	419103
threaded rods reflecting structural beam size		
8x	M12-F-SL WS ¾ lock nut	382897

16	Pivot connector MIC-U-MA	
MI-90 fixed on MI-90		
1x	MIC-U-MA	304806
incl. all connectivity material		

17	Girders	
MI-90 girder		
	MI-90 3m girder	304798
	MI-90 6m girder	304799

18	Plastic end cap MIA-EC-90	
End cap for MI-90		
1x	MIA-EC-90 plastic endcap	432077

Application description		
MI System - Bracket (Cantilever Arm) On Steel		
General comments		
<ul style="list-style-type: none"> <li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li> </ul>		

Application			
	6	MI System	Steel
		Clamps	
		Accessories	

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# MI System - Bracket (Cantilever Arm) On Steel - Boxed Beam Options - Horizontal upper MI-120

1	Boxing flange "Type A" upper connector
2	Boxing web "Type A" upper connector
1x	MIC-S120-A connector 304818
	Contains connector and all through bolts
1x	MIB-SA base plate 304821
4x	AM12x1000-HDG 8.8 th. rod 419103
	threaded rods reflecting structural beam size
8x	M12-F-SL WS ¾ lock nut 382897

16	Pivot connector MIC-U-MA MI-90 fixed on MI-90
1x	MIC-U-MA 304806
	incl. all connectivity material

3	Boxing flange "Type B" upper connector
4	Boxing web "Type B" upper connector
1x	MIC-S120-B connector 304819
	Contains connector and all through bolts
1x	MIB-SB base plate 304822
4x	AM12x1000-HDG 8.8 th. rod 419103
	threaded rods reflecting structural beam size
8x	M12-F-SL WS ¾ lock nut 382897

5	Boxing flange "Type C" upper connector
6	Boxing web "Type C" upper connector
1x	MIC-S120-C connector 304820
	Contains connector and all through bolts
1x	MIB-SC base plate 304823
4x	AM12x1000-HDG 8.8 th. rod 419103
	threaded rods reflecting structural beam size
8x	M12-F-SL WS ¾ lock nut 382897

17	Girders MI-120 girder
	MI-120 3m girder 304800
	MI-120 6m girder 304801

18	Girders MI-90 girder
	MI-90 3m girder 304798
	MI-90 6m girder 304799

19	Plastic end cap MIA-EC-120 End cap for MI-120
1x	MIA-EC-120 plastic endcap 432078

6	Brackets MIC-S90-C "Type C" Steel brackets
	Bracket (Cantilever arm)
1x	MIC-S120-C-500 bracket 270463
	MIC-S120-C-750 bracket 270464
	MIC-S120-C-1000 bracket 270465
	MIC-S120-C-1500 bracket 270466
	MIC-S120-C-2000 bracket 270467

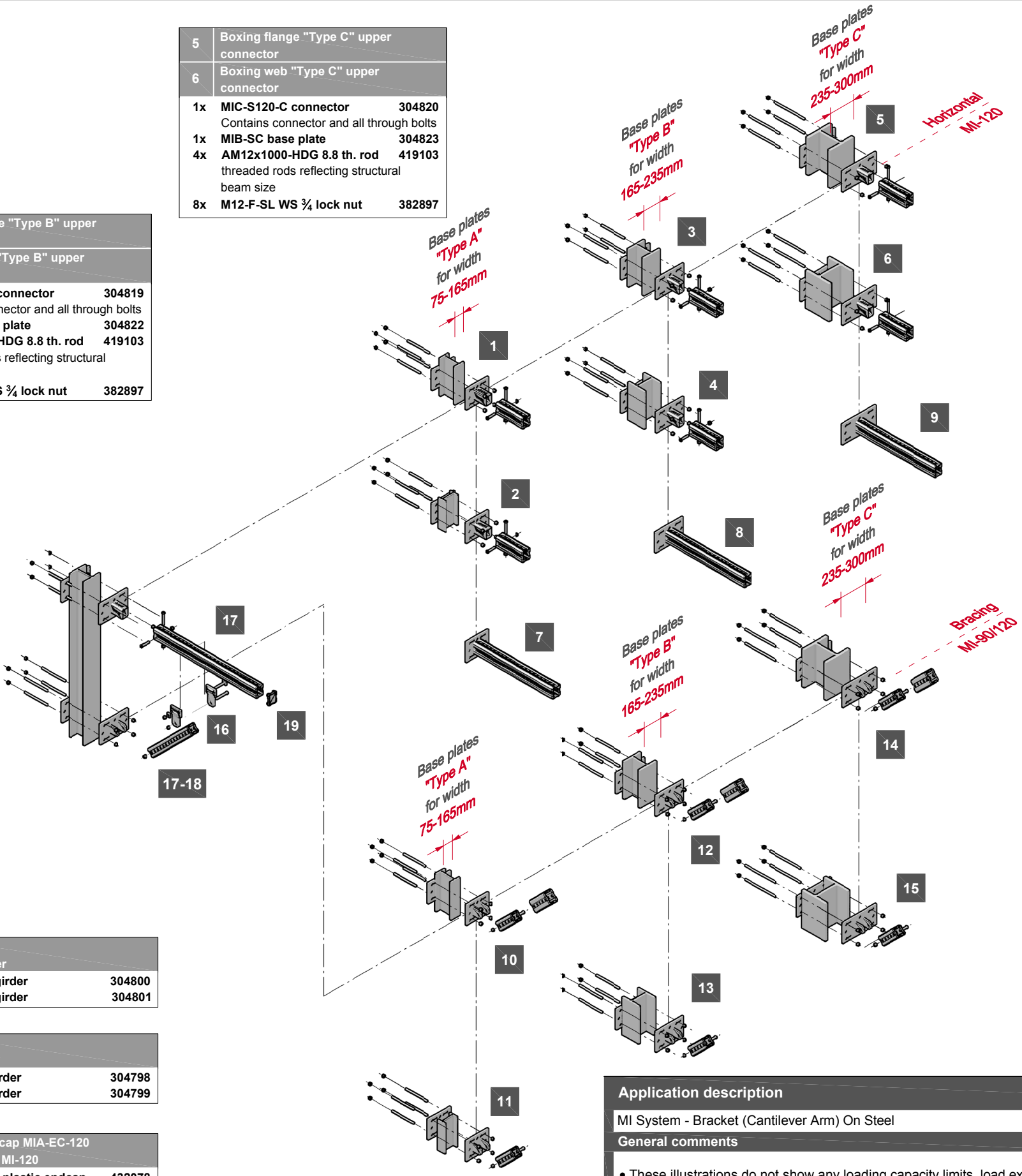
5	Brackets MIC-S120-B "Type B" Steel brackets
	Bracket (Cantilever arm)
1x	MIC-S120-B-500 bracket 267799
	MIC-S120-B-750 bracket 270459
	MIC-S120-B-1000 bracket 270460
	MIC-S120-B-1500 bracket 270461
	MIC-S120-B-2000 bracket 270462

4	Brackets MIC-S120-A "Type A" Steel brackets
	Bracket (Cantilever arm)
1x	MIC-S120-A-500 bracket 267794
	MIC-S120-A-750 bracket 267795
	MIC-S120-A-1000 bracket 267796
	MIC-S120-A-1500 bracket 267797
	MIC-S120-A-2000 bracket 267798

14	Boxing flange "Type C" upper brace connector
15	Boxing web "Type C" upper brace connector
1x	MIC-SC-MA connector 304817
	Contains connector and all through bolts
1x	MIB-SC base plate 304823
4x	AM12x1000-HDG 8.8 th. rod 419103
	threaded rods reflecting structural beam size
8x	M12-F-SL WS ¾ lock nut 382897

12	Boxing flange "Type B" upper brace connector
13	Boxing web "Type B" upper brace connector
1x	MIC-SB-MA connector 304816
	Contains connector and all through bolts
1x	MIB-SB base plate 304822
4x	AM12x1000-HDG 8.8 th. rod 419103
	threaded rods reflecting structural beam size
8x	M12-F-SL WS ¾ lock nut 382897

10	Boxing flange "Type A" upper brace connector
11	Boxing web "Type A" upper brace connector
1x	MIC-SA-MA connector 304815
	Contains connector and all through bolts
1x	MIB-SA base plate 304821
4x	AM12x1000-HDG 8.8 th. rod 419103
	threaded rods reflecting structural beam size
8x	M12-F-SL WS ¾ lock nut 382897



Application description	Application	Product lines	Base material
MI System - Bracket (Cantilever Arm) On Steel	6	MI System	Steel
General comments		Clamps	
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1	Clamping flange "Type A" upper connector	
1x	MIC-S90-A connector Contains connector and all through bolts	304812
4x	MI-SGC M12 beam clamp	233859

10	Pivot connector MIC-U-MA MI-90 fixed on MI-90	
1x	MIC-U-MA incl. all connectivity material	304806

11	Girders MI-90 girder	
	MI-90 3m girder	304798
	MI-90 6m girder	304799

12	Plastic end cap MIA-EC-90 End cap for MI-90	
1x	MIA-EC-90 plastic endcap	432077

<b>3</b>	<b>Clamping flange "Type C"</b> upper connector
<b>1x</b>	<b>MIC-S90-C connector</b> <b>304814</b> Contains connector and all through bolts
<b>4x</b>	<b>MI-SGC M12 beam clamp</b> <b>233859</b>

Base plates  
"Type A"  
for width  
165mm

12	Plastic end cap MIA-EC-90 End cap for MI-90	
1x	MIA-EC-90 plastic endcap	432077

<b>7</b>	<b>Clamping flange "Type A" upper brace connector</b>	
<b>1x</b>	<b>MIC-SA-MA connector</b>	<b>304815</b>
	Contains connector and all through bolts	
<b>4x</b>	<b>MI-SGC M12 beam clamp</b>	<b>233859</b>

<b>8</b>	<b>Clamping flange "Type B" bottom brace connector</b>	
<b>1x</b>	<b>MIC-SB-MA connector</b>	<b>304816</b>
	Contains connector and all through bolts	
<b>4x</b>	<b>MI-SGC M12 beam clamp</b>	<b>233859</b>


9	Clamping flange "Type C" bottom brace connector	
1x	<b>MIC-SC-MA connector</b>	<b>304817</b>
	Contains connector and all through bolts	
4x	<b>MI-SGC M12 beam clamp</b>	<b>233859</b>

4	Brackets MIC-S90-A "Type A"	
	Steel brackets	
Bracket (Cantilever arm)		
1x	MIC-S90-A-500 bracket	267774
	MIC-S90-A-750 bracket	267775
	MIC-S90-A-1000 bracket	267776
	MIC-S90-A-1500 bracket	267777
	MIC-S90-A-2000 bracket	267778

5	Brackets MIC-S90-B "Type B" Steel brackets	
Bracket (Cantilever arm)		
1x	MIC-S90-B-500 bracket	267779
	MIC-S90-B-750 bracket	267780
	MIC-S90-B-1000 bracket	267781
	MIC-S90-B-1500 bracket	267782
	MIC-S90-B-2000 bracket	267783

6	Brackets MIC-S90-C "Type C"	
	Steel brackets	
Bracket (Cantilever arm)		
1x	MIC-S90-C-500 bracket	267784
	MIC-S90-C-750 bracket	267785
	MIC-S90-C-1000 bracket	267786
	MIC-S90-C-1500 bracket	267787
	MIC-S90-C-2000 bracket	267788

Application description			
MI System - Bracket (Cantilever Arm) On Steel			
General comments			
<ul style="list-style-type: none"> <li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li> </ul>			

Application	Product lines	Base material
	MI System	Steel
	Clamps	
	Accessories	

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MI System - Bracket (Cantilever Arm) On Steel - Clamped Beam Options - Horizontal upper MI-120

10

Pivot connector MIC-U-MA  
MI-90 fixed on MI-90

1x MIC-U-MA 304806  
incl. all connectivity material

11

Girders  
MI-90 girder

MI-90 3m girder 304798  
MI-90 6m girder 304799

12

Girders  
MI-120 girder

MI-120 3m girder 304800  
MI-120 6m girder 304801

1

Clamping flange "Type A"  
upper connector

1x MIC-S120-A connector 304818  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

2

Clamping flange "Type B"  
upper connector

1x MIC-S120-B connector 304819  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

3

Clamping flange "Type C"  
upper connector

1x MIC-S120-C connector 304820  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

4

Brackets MIC-S120-A "Type A"  
Steel brackets

Bracket (Cantilever arm)  
1x MIC-S120-A-500 bracket 267794  
MIC-S120-A-750 bracket 267795  
MIC-S120-A-1000 bracket 267796  
MIC-S120-A-1500 bracket 267797  
MIC-S120-A-2000 bracket 267798

5

Brackets MIC-S120-B "Type B"  
Steel brackets

Bracket (Cantilever arm)  
1x MIC-S120-B-500 bracket 267799  
MIC-S120-B-750 bracket 270459  
MIC-S120-B-1000 bracket 270460  
MIC-S120-B-1500 bracket 270461  
MIC-S120-B-2000 bracket 270462

6

Brackets MIC-S120-C "Type C"  
Steel brackets

Bracket (Cantilever arm)  
1x MIC-S120-C-500 bracket 270463  
MIC-S120-C-750 bracket 270464  
MIC-S120-C-1000 bracket 270465  
MIC-S120-C-1500 bracket 270466  
MIC-S120-C-2000 bracket 270467

7

Clamping flange "Type A" bottom  
brace connector

1x MIC-SA-MA connector 304815  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

8

Clamping flange "Type B" bottom  
brace connector

1x MIC-SB-MA connector 304816  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

9

Clamping flange "Type C" bottom  
brace connector

1x MIC-SC-MA connector 304817  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

13

Plastic end cap MIA-EC-120  
End cap for MI-120

1x MIA-EC-120 plastic endcap 432078

Application description

MI System - Bracket (Cantilever Arm) On Steel

General comments

• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application

6

MI System

Clamps

Accessories

Product lines

MI System

Clamps

Accessories

Base material

Steel

14

Clamping flange "Type C" bottom  
brace connector

1x MIC-SC-MA connector 304817  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

13

Clamping flange "Type B" bottom  
brace connector

1x MIC-SB-MA connector 304816  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

12

Clamping flange "Type A" bottom  
brace connector

1x MIC-SA-MA connector 304815  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

9

Clamping flange "Type C" bottom  
brace connector

1x MIC-SC-MA connector 304817  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

8

Clamping flange "Type B" bottom  
brace connector

1x MIC-SB-MA connector 304816  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

7

Clamping flange "Type A" bottom  
brace connector

1x MIC-SA-MA connector 304815  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

4

Brackets MIC-S120-A "Type A"  
Steel brackets

Bracket (Cantilever arm)  
1x MIC-S120-A-500 bracket 267794  
MIC-S120-A-750 bracket 267795  
MIC-S120-A-1000 bracket 267796  
MIC-S120-A-1500 bracket 267797  
MIC-S120-A-2000 bracket 267798

5

Brackets MIC-S120-B "Type B"  
Steel brackets

Bracket (Cantilever arm)  
1x MIC-S120-B-500 bracket 267799  
MIC-S120-B-750 bracket 270459  
MIC-S120-B-1000 bracket 270460  
MIC-S120-B-1500 bracket 270461  
MIC-S120-B-2000 bracket 270462

6

Brackets MIC-S120-C "Type C"  
Steel brackets

Bracket (Cantilever arm)  
1x MIC-S120-C-500 bracket 270463  
MIC-S120-C-750 bracket 270464  
MIC-S120-C-1000 bracket 270465  
MIC-S120-C-1500 bracket 270466  
MIC-S120-C-2000 bracket 270467

1

Clamping flange "Type A"  
upper connector

1x MIC-S120-A connector 304818  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

2

Clamping flange "Type B"  
upper connector

1x MIC-S120-B connector 304819  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

3

Clamping flange "Type C"  
upper connector

1x MIC-S120-C connector 304820  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

4

Brackets MIC-S120-A "Type A"  
Steel brackets

Bracket (Cantilever arm)  
1x MIC-S120-A-500 bracket 267794  
MIC-S120-A-750 bracket 267795  
MIC-S120-A-1000 bracket 267796  
MIC-S120-A-1500 bracket 267797  
MIC-S120-A-2000 bracket 267798

5

Brackets MIC-S120-B "Type B"  
Steel brackets

Bracket (Cantilever arm)  
1x MIC-S120-B-500 bracket 267799  
MIC-S120-B-750 bracket 270459  
MIC-S120-B-1000 bracket 270460  
MIC-S120-B-1500 bracket 270461  
MIC-S120-B-2000 bracket 270462

6

Brackets MIC-S120-C "Type C"  
Steel brackets

Bracket (Cantilever arm)  
1x MIC-S120-C-500 bracket 270463  
MIC-S120-C-750 bracket 270464  
MIC-S120-C-1000 bracket 270465  
MIC-S120-C-1500 bracket 270466  
MIC-S120-C-2000 bracket 270467

7

Clamping flange "Type A" bottom  
brace connector

1x MIC-SA-MA connector 304815  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

8

Clamping flange "Type B" bottom  
brace connector

1x MIC-SB-MA connector 304816  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

9

Clamping flange "Type C" bottom  
brace connector

1x MIC-SC-MA connector 304817  
Contains connector and all through bolts  
4x MI-SGC M12 beam clamp 233859

10

Pivot connector MIC-U-MA  
MI-90 fixed on MI-90

1x MIC-U-MA 304806  
incl. all connectivity material

11

Girders  
MI-90 girder

MI-90 3m girder 304798  
MI-90 6m girder 304799

12

Girders  
MI-120 girder

MI-120 3m girder 304800  
MI-120 6m girder 304801

13

Plastic end cap MIA-EC-120  
End cap for MI-120

1x MIA-EC-120 plastic endcap 432078

Base plates "Type A" for width 75-165mm

Base plates "Type B" for width 165-235mm

Base plates "Type C" for width 235-300mm

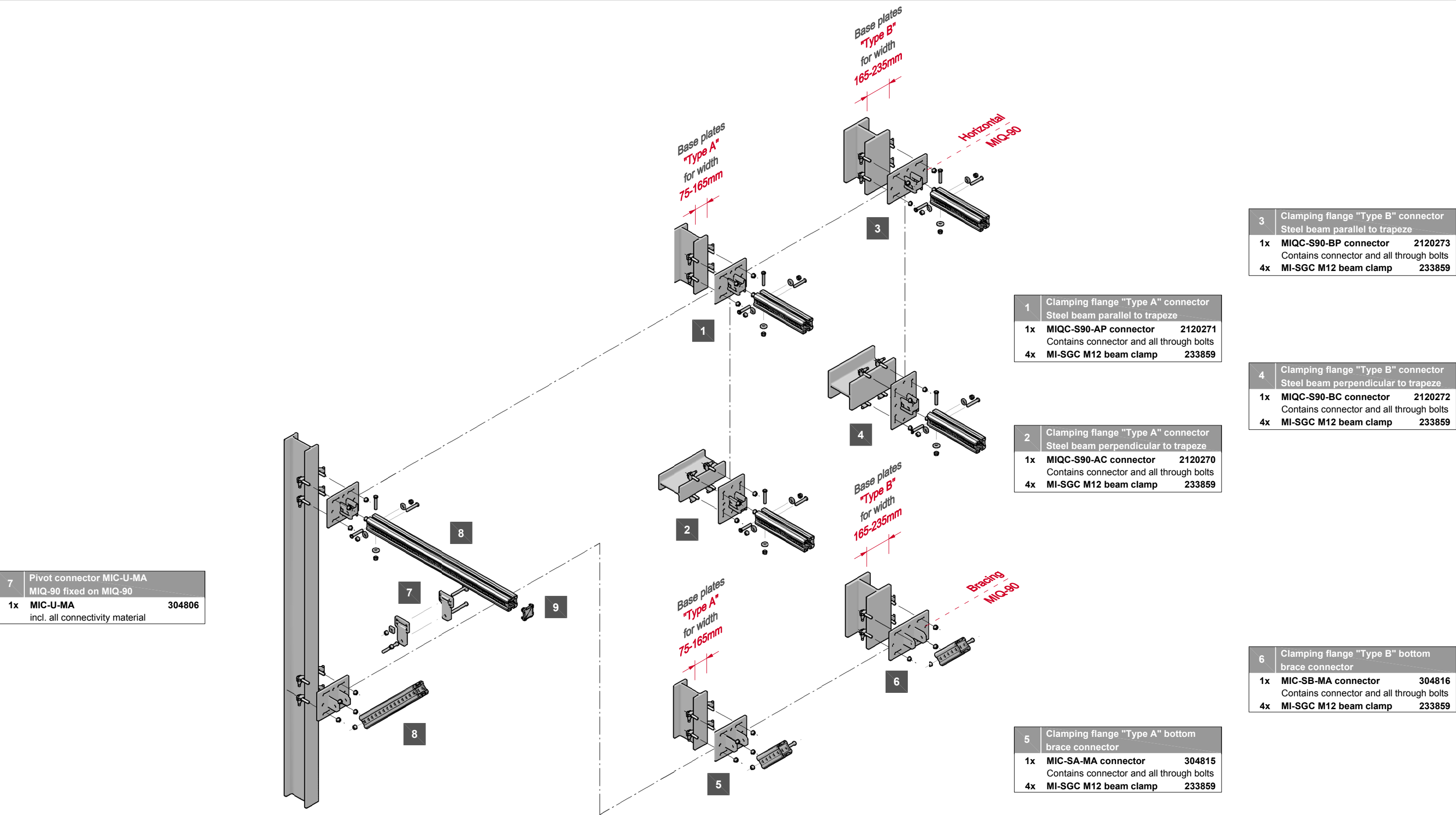
Horizontal MI-120


Bracing MI-90/120

Page 38



MIQ System - Bracket (Cantilever Arm) On Steel - Clamped Beam Options - Horizontal upper



Application description	Application	Product lines	Base material
MIQ System - Bracket (Cantilever Arm) On Steel	 <div>6</div>	MIQ System	Steel
General comments		Clamps	
<ul style="list-style-type: none"><li>• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>		Accessories	

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MI System - Goal Post On Concrete - Options

13	Connector MIC-90-LH MI-90 fixed on MI-90
14	Connector MIC-90-LH MI-90 fixed on MI-120
15	Connector MIC-90-LH MI-120 fixed on MI-90
16	Connector MIC-90-LH MI-120 fixed on MI-120
Angle does not include all connectivity material	
1x	MIC-90-LH 2048107
Connectivity material ordered separately	
4x	MIA-EH90 easy hand screw 304887
4x	MIA-TP serrated plate 305707
4x	M12-F-SL-WS ¾" lock nut 382897

9	Connector MIC-T MI-90 fixed on MI-90
10	Connector MIC-T MI-90 fixed on MI-120
11	Connector MIC-T MI-120 fixed on MI-90
12	Connector MIC-T MI-120 fixed on MI-120
1x	MIC-T 304807
Incl. all connectivity material	

6	Connector MIC-L MI-90 fixed on MI-90
1x	MIC-90-L 304805
incl. all connectivity material	
7	Connector MIC-L MI-90 fixed on MI-120
1x	MIC-90-L 304805
incl. all connectivity material	
2x	MIA-EH120 easy screw 304888
the original MIA-EH 90 from the package will remain unused	

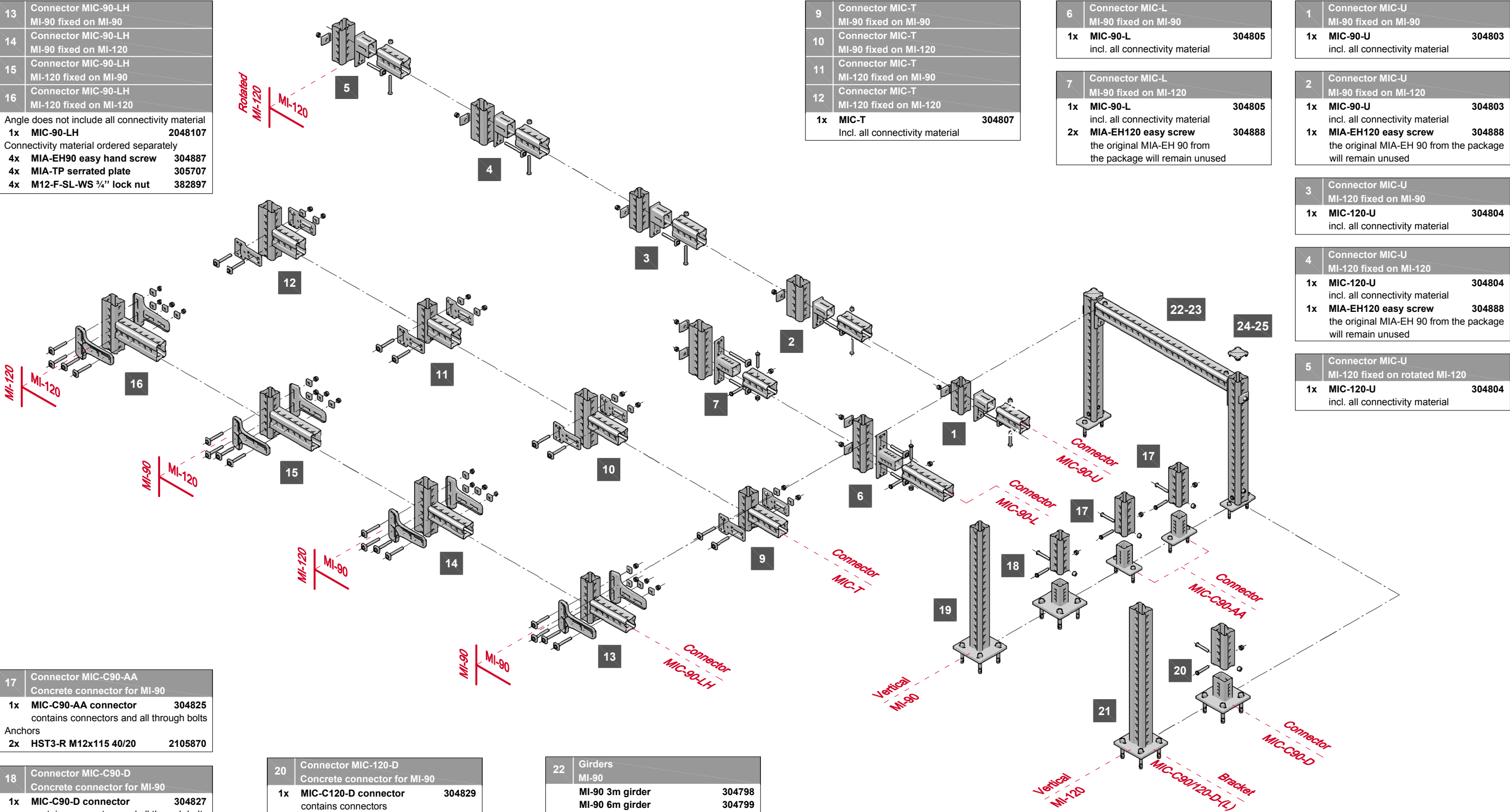
1	Connector MIC-U MI-90 fixed on MI-90
1x	MIC-90-U 304803
incl. all connectivity material	

2	Connector MIC-U MI-90 fixed on MI-120
1x	MIC-90-U 304803
incl. all connectivity material	
1x	MIA-EH120 easy screw 304888
the original MIA-EH 90 from the package will remain unused	

3	Connector MIC-U MI-120 fixed on MI-90
1x	MIC-120-U 304804
incl. all connectivity material	

4	Connector MIC-U MI-120 fixed on MI-120
1x	MIC-120-U 304804
incl. all connectivity material	
1x	MIA-EH120 easy screw 304888
the original MIA-EH 90 from the package will remain unused	

5	Connector MIC-U MI-120 fixed on rotated MI-120
1x	MIC-120-U 304804
incl. all connectivity material	



17	Connector MIC-C90-AA Concrete connector for MI-90
1x	MIC-C90-AA connector 304825
contains connectors and all through bolts	
Anchors	
2x	HST3-R M12x115 40/20 2105870

18	Connector MIC-C90-D Concrete connector for MI-90
1x	MIC-C90-D connector 304827
contains connectors and all through bolts	
Anchors	
4x	HST3-R M16x135 35/15 2105876

19	Brackets MIC-C120-D for concrete
Bracket (Cantilever arm)	
1x	MIC-C90-D-500 267789
	MIC-C90-D-750 267790
	MIC-C90-D-1000 267791
	MIC-C90-D-1500 267792
	MIC-C90-D-2000 267793
Anchors	
4x	HST3-R M16x135 35/15 2105876

20	Connector MIC-120-D Concrete connector for MI-90
1x	MIC-C120-D connector 304829
contains connectors and all through bolts	
Anchors	
4x	HST3-R M16x135 35/15 2105876
stud anchor	

21	Brackets MIC-C120-D for concrete
Bracket (Cantilever arm)	
1x	MIC-C120-D-500 270468
	MIC-C120-D-750 270469
	MIC-C120-D-1000 270470
	MIC-C120-D-1500 270471
	MIC-C120-D-2000 270472
Anchors	
4x	HST3-R M16x135 35/15 2105876

22	Girders MI-90
	MI-90 3m girder 304798
	MI-90 6m girder 304799

23	Girders MI-120
	MI-120 3m girder 304800
	MI-120 6m girder 304801

24	Plastic end cap MIA-EC-120 End cap for MI-120
1x	MIA-EC-120 plastic endcap 432078

25	Plastic end cap MIA-EC-90 End cap for MI-90
1x	MIA-EC-90 plastic endcap 432077

Application description	Application	Product lines	Base material
MI System - Goal Post On Concrete	7	MI System	Concrete
General comments		Anchors	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations		Accessories	
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9	Girders MIQ-90		
10	Plastic end cap MIA-EC-90 End cap for MIQ-90		
1x	MIA-EC-90 plastic endcap		432077

3	Connector MIQC-90-HT-V Rotated MIQ-90 fixed on MIQ-90	
1x	MIQC-90-HT-V incl. all connectivity material	2134818

10	Plastic end cap MIA-EC-90 End cap for MIQ-90	
1x	MIA-EC-90 plastic endcap	432077

6	Connector MIQC-90-L MIQ-90 fixed on MIQ-90	
2x	<b>MIQC-90-L</b> incl. all connectivity material	<b>2119868</b>

7	Connector MIC-90-LH	
	MI-90 fixed on MI-90	
Angle does not include all connectivity material		
1x	MIC-90-LH	2048107
Connectivity material ordered separately		
4x	MIA-EH90 easy hand screw	304887
4x	MIA-TP serrated plate	305707
4x	M12-F-SL-WS ¼" lock nut	382897

8	Connector MIQC-C90 Concrete connector for MIQ-90	
1x	<b>MIQC-C90 connector</b>	<b>2120144</b>
contains connectors and all through bolts		
Anchors		
4x	<b>HST3-R M16x135 35/15</b>	<b>2105876</b>

<b>10</b>	<b>Connector MIQC-C90-U-V</b> <b>Concrete connector for MIQ-90</b>
<b>1x</b>	<b>MIQC-C90-U-V connector</b> <b>2161806</b> contains connectors and all through bolts
<b>Anchors</b>	
<b>2x</b>	<b>HST3-R M12x105 30/10</b> <b>2105869</b>

10

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MI/MIQ System - Goal Post On Concrete - Options

1	Connector MIQC-90-MI MIQ-90 fixed on MI-90
3	Connector MIQC-90-MI MIQ-90 fixed on rotated MI-120
1x	MIQC-90-MI 2140257 incl. all connectivity material

2	Connector MIQC-90-MI MIQ-90 fixed on MI-120
1x	MIQC-90-MI 2140257 incl. all connectivity material
1x	MIA-EH120 easy screw 304888 the original MIA-EH 90 from the package will remain unused

4	Connector MIQC-90-MI-V MIQ-90 fixed on MI-90
6	Connector MIQC-90-MI-V MIQ-90 fixed on rotated MI-120
1x	MIQC-90-MI-V 2140258 incl. all connectivity material

5	Connector MIQC-90-MI-V MIQ-90 fixed on MI-120
1x	MIQC-90-MI-V 2140258 incl. all connectivity material
1x	MIA-EH120 easy screw 304888 the original MIA-EH 90 from the package will remain unused

7	Connector MIC-90-LH MIQ-90 fixed on MI-90
8	Connector MIC-90-LH MIQ-90 fixed on MI-120
Angle does not include all connectivity material	
1x	MIC-90-LH 2048107
Connectivity material ordered separately	
4x	MIA-EH90 easy hand screw 304887
4x	MIA-TP serrated plate 305707
4x	M12-F-SL-WS ¼" lock nut 382897

17	Plastic end cap MIA-EC-90 End cap for MI-90
1x	MIA-EC-90 plastic endcap 432077

18	Plastic end cap MIA-EC-120 End cap for MI-120
1x	MIA-EC-120 plastic endcap 432078

14	Girders MIQ-90
	MIQ-90 3m girder 2119866
	MIQ-90 6m girder 2119867

15	Girders MI-90
	MI-90 3m girder 304798
	MI-90 6m girder 304799

16	Girders MI-120
	MI-120 3m girder 304800
	MI-120 6m girder 304801

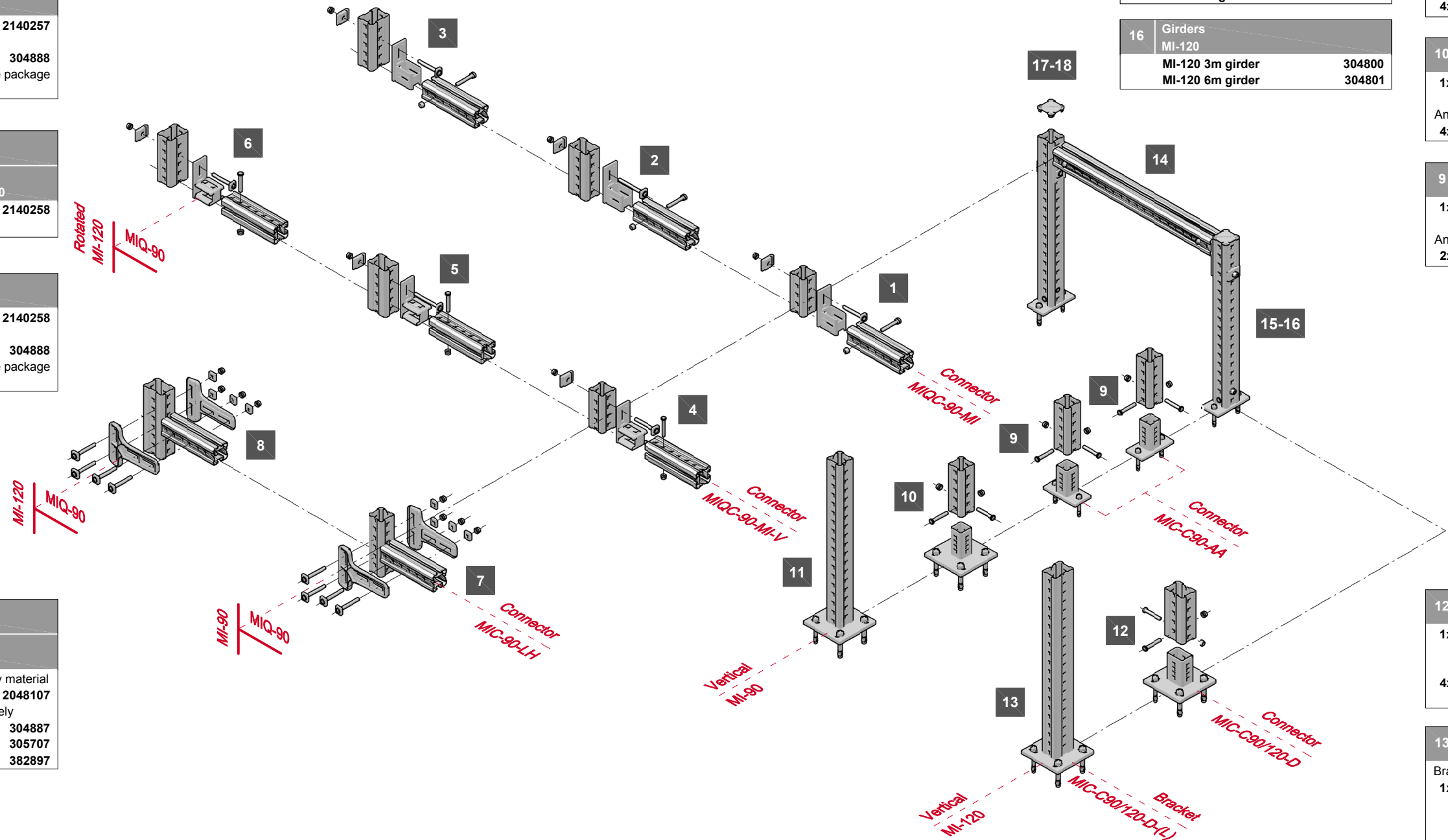
11	Brackets MIC-C120-D for concrete
Bracket (Cantilever arm)	
1x	MIC-C90-D-500 267789
	MIC-C90-D-750 267790
	MIC-C90-D-1000 267791
	MIC-C90-D-1500 267792
	MIC-C90-D-2000 267793
Anchors	
4x	HST3-R M16x135 35/15 2105876


10	Connector MIC-C90-D Concrete connector for MI-90
1x	MIC-C90-D connector 304827 contains connectors and all through bolts
Anchors	
4x	HST3-R M16x135 35/15 2105876

9	Connector MIC-C90-AA Concrete connector for MI-90
1x	MIC-C90-AA connector 304825 contains connectors and all through bolts
Anchors	
2x	HST3-R M12x115 40/20 2105870

12	Connector MIC-120-D Concrete connector for MI-90
1x	MIC-C120-D connector 304829 contains connectors and all through bolts
4x	HST3-R M16x135 35/15 2105876 stud anchor

13	Brackets MIC-C120-D for concrete
Bracket (Cantilever arm)	
1x	MIC-C120-D-500 270468
	MIC-C120-D-750 270469
	MIC-C120-D-1000 270470
	MIC-C120-D-1500 270471
	MIC-C120-D-2000 270472
Anchors	
4x	HST3-R M16x135 35/15 2105876



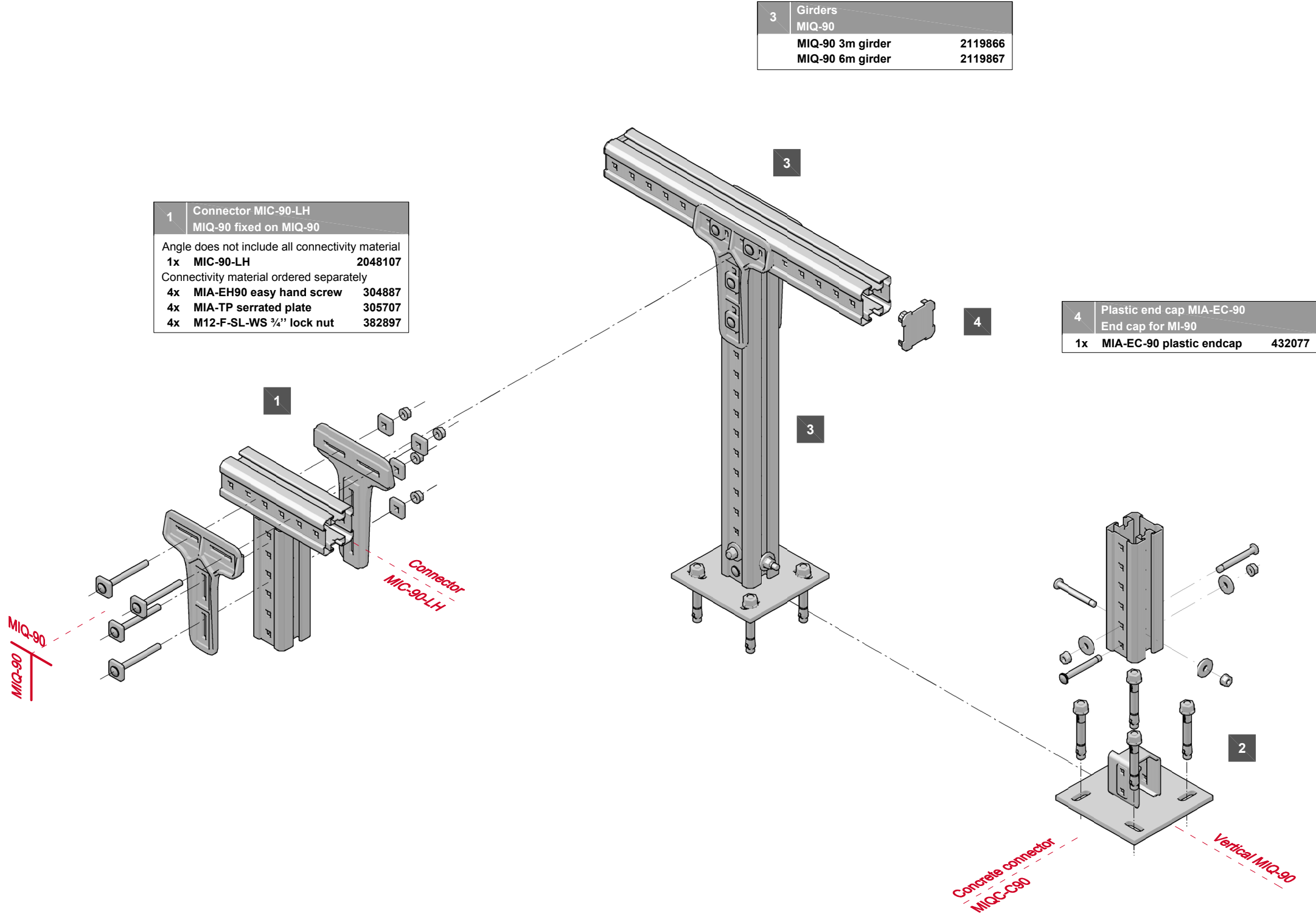
Application description	Application	Product lines	Base material
MI/MIQ System - Goal Post On Concrete	 7	MI/MIQ System	Concrete
General comments		Anchors	
<ul style="list-style-type: none"><li>• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>		Accessories	


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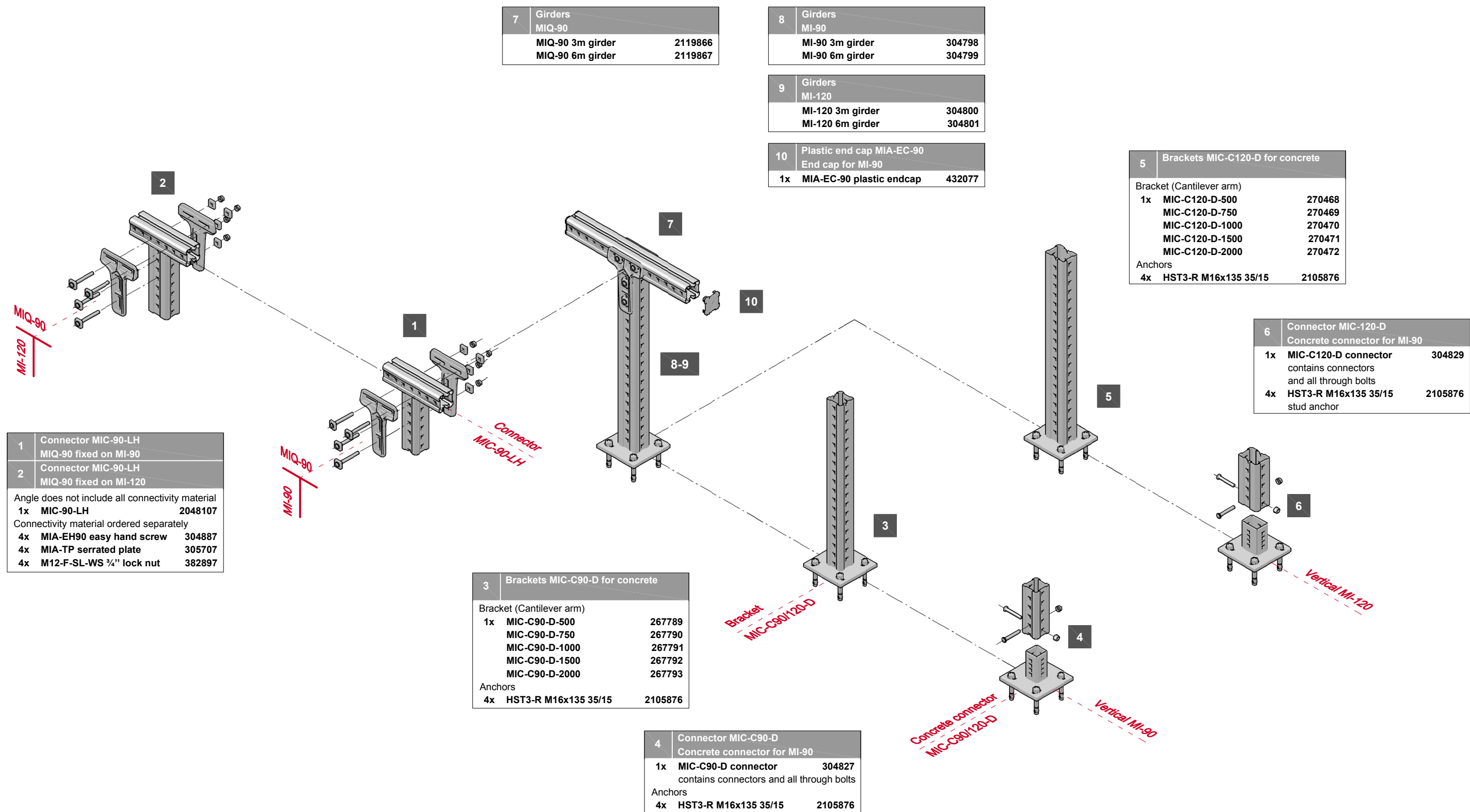
MIQ System - Floor Tree-T On Concrete - Options




Application description		Application	Product lines	Base material
MIQ System - T-tree On Concrete		 <div>8</div>	MIQ System	Concrete
General comments			Anchors	
<ul style="list-style-type: none"><li>• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>			Accessories	

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MI/MIQ System - Floor Tree-T On Concrete - Options



Application description	Application	Product lines	Base material
MI/MIQ System - T-tree On Concrete	 <b>8</b>	MI/MIQ System	Concrete
General comments		Anchors	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations		Accessories	

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# MIQ System - Floor Tree-L On Concrete - Options

6	Girders MIQ-90	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

7	Plastic end cap MIA-EC-90 End cap for MI-90	
1x	MIA-EC-90 plastic endcap	432077

1	Connector MIC-90-LH MIQ-90 fixed on MIQ-90	
Angle does not include all connectivity material		
1x	MIC-90-LH	2048107
Connectivity material ordered separately		
4x	MIA-EH90 easy hand screw	304887
4x	MIA-TP serrated plate	305707
4x	M12-F-SL-WS 3/4" lock nut	382897

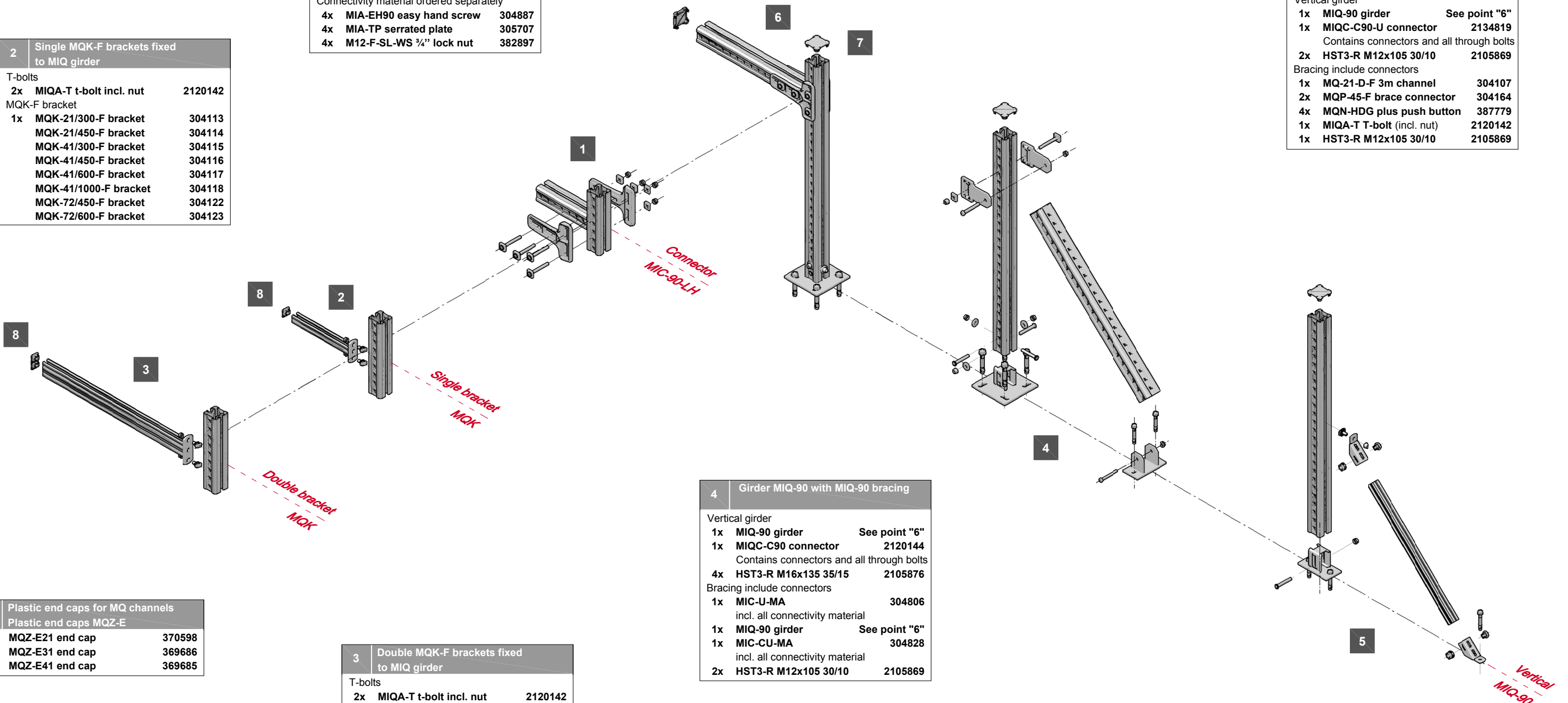
2	Single MQK-F brackets fixed to MIQ girder	
T-bolts		
2x	MIQA-T t-bolt incl. nut	2120142
MQK-F bracket		
1x	MQK-21/300-F bracket	304113
	MQK-21/450-F bracket	304114
	MQK-41/300-F bracket	304115
	MQK-41/450-F bracket	304116
	MQK-41/600-F bracket	304117
	MQK-41/1000-F bracket	304118
	MQK-72/450-F bracket	304122
	MQK-72/600-F bracket	304123


5	Girder MIQ-90 with MQ-41 bracing	
Vertical girder		
1x	MIQ-90 girder	See point "6"
1x	MIQC-C90-U connector	2134819
Contains connectors and all through bolts		
2x	HST3-R M12x105 30/10	2105869
Bracing include connectors		
1x	MQ-21-D-F 3m channel	304107
2x	MQP-45-F brace connector	304164
4x	MQN-HDG plus push button	387779
1x	MIQA-T T-bolt (incl. nut)	2120142
1x	HST3-R M12x105 30/10	2105869

4	Girder MIQ-90 with MIQ-90 bracing	
Vertical girder		
1x	MIQ-90 girder	See point "6"
1x	MIQC-C90 connector	2120144
Contains connectors and all through bolts		
4x	HST3-R M16x135 35/15	2105876
Bracing include connectors		
1x	MIC-U-MA	304806
incl. all connectivity material		
1x	MIQ-90 girder	See point "6"
1x	MIC-CU-MA	304828
incl. all connectivity material		
2x	HST3-R M12x105 30/10	2105869

3	Double MQK-F brackets fixed to MIQ girder	
T-bolts		
2x	MIQA-T t-bolt incl. nut	2120142
MQK-F bracket		
1x	MQK-21 D/300-F bracket	304124
	MQK-21 D/450-F bracket	304125
	MQK-21 D/600-F bracket	304126
	MQK-41 D/1000-F bracket	304127

8	Plastic end caps for MQ channels Plastic end caps MQZ-E	
	MQZ-E21 end cap	370598
	MQZ-E31 end cap	369686
	MQZ-E41 end cap	369685



Application description	Application	Product lines	Base material
MIQ System - L-tree On Concrete	 <b>9</b>	MIQ System	Concrete
General comments		Anchors	
<ul style="list-style-type: none"> <li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li> </ul>		Accessories	

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MI/MIQ System - Floor Tree-L On Concrete - Options

1	Connector MIC-90-LH MIQ-90 fixed on MI-90
2	Connector MIC-90-LH MIQ-90 fixed on MI-120
Angle does not include all connectivity material	
1x	MIC-90-LH 2048107
Connectivity material ordered separately	
4x	MIA-EH90 easy hand screw 304887
4x	MIA-TP serrated plate 305707
4x	M12-F-SL-WS 3/4" lock nut 382897

10	Girders MIQ-90
MIQ-90 3m girder	2119866
MIQ-90 6m girder	2119867

11	Girders MI-90
MI-90 3m girder	304798
MI-90 6m girder	304799

12	Girders MI-120
MI-120 3m girder	304800
MI-120 6m girder	304801

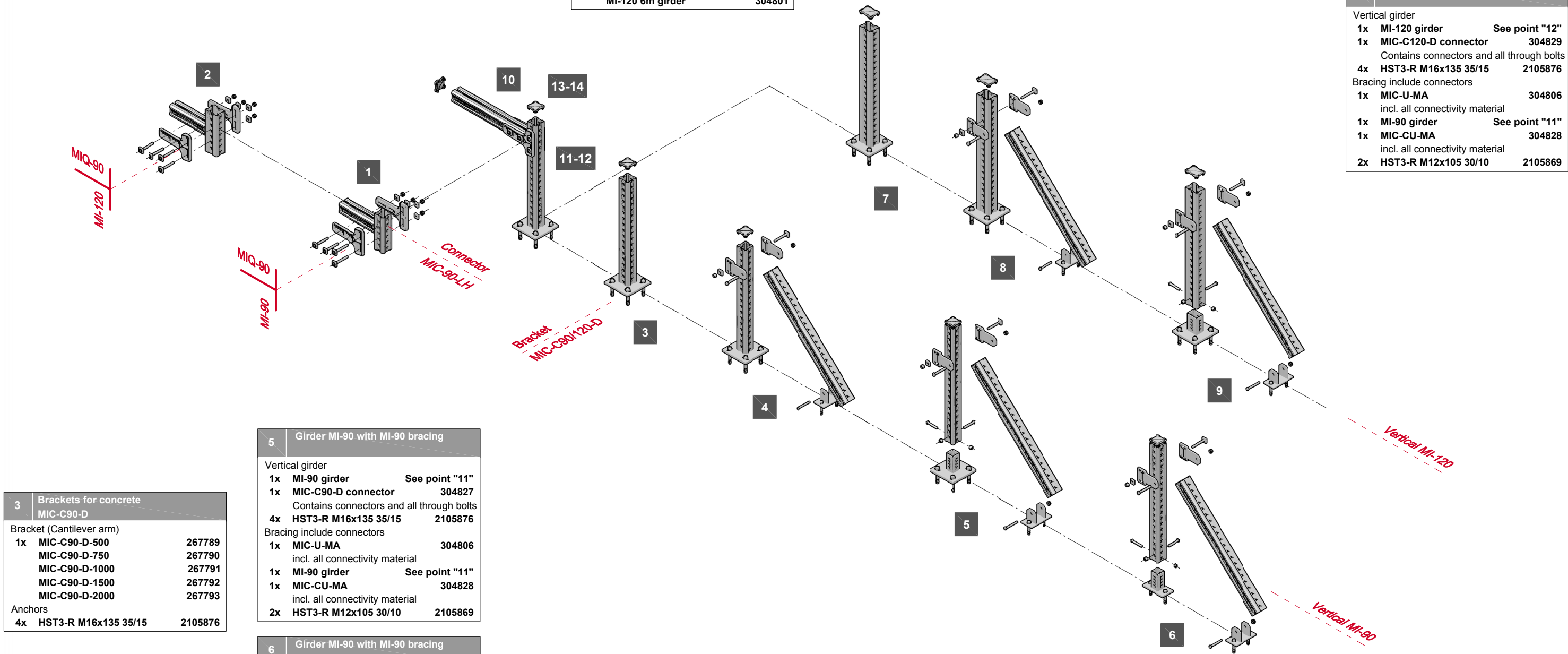
13	Plastic end cap MIA-EC-90 End cap for MI-90
1x	MIA-EC-90 plastic endcap 432077

14	Plastic end cap MIA-EC-120 End cap for MI-120
1x	MIA-EC-120 plastic endcap 432078

7	Brackets for concrete MIC-C120-D
Bracket (Cantilever arm)	
1x	MIC-C120-D-500 270468
	MIC-C120-D-750 270469
	MIC-C120-D-1000 270470
	MIC-C120-D-1500 270471
	MIC-C120-D-2000 270472
Anchors	
4x	HST3-R M16x135 35/15 2105876

8	Bracket MIC-C120-D with MI-90 bracing
Bracket (Cantilever arm)	
1x	MIC-C120-D bracket See point "7"
4x	HST3-R M16x135 35/15 2105876
Bracing include connectors	
1x	MIC-U-MA 304806
incl. all connectivity material	
1x	MI-90 girder See point "11"
1x	MIC-CU-MA 304828
incl. all connectivity material	
2x	HST3-R M12x105 30/10 2105869

9	Girder MI-120 with MI-90 bracing
Vertical girder	
1x	MI-120 girder See point "12"
1x	MIC-C120-D connector 304829
Contains connectors and all through bolts	
4x	HST3-R M16x135 35/15 2105876
Bracing include connectors	
1x	MIC-U-MA 304806
incl. all connectivity material	
1x	MI-90 girder See point "11"
1x	MIC-CU-MA 304828
incl. all connectivity material	
2x	HST3-R M12x105 30/10 2105869



3	Brackets for concrete MIC-C90-D
Bracket (Cantilever arm)	
1x	MIC-C90-D-500 267789
	MIC-C90-D-750 267790
	MIC-C90-D-1000 267791
	MIC-C90-D-1500 267792
	MIC-C90-D-2000 267793
Anchors	
4x	HST3-R M16x135 35/15 2105876

5	Girder MI-90 with MI-90 bracing
Vertical girder	
1x	MI-90 girder See point "11"
1x	MIC-C90-D connector 304827
Contains connectors and all through bolts	
4x	HST3-R M16x135 35/15 2105876
Bracing include connectors	
1x	MIC-U-MA 304806
incl. all connectivity material	
1x	MI-90 girder See point "11"
1x	MIC-CU-MA 304828
incl. all connectivity material	
2x	HST3-R M12x105 30/10 2105869

4	Bracket MIC-C90-D with MI-90 bracing
Bracket (Cantilever arm)	
1x	MIC-C90-D bracket See point "3"
4x	HST3-R M16x135 35/15 2105876
Bracing include connectors	
1x	MIC-U-MA 304806
incl. all connectivity material	
1x	MI-90 girder See point "11"
1x	MIC-CU-MA 304828
incl. all connectivity material	
2x	HST3-R M12x105 30/10 2105869

6	Girder MI-90 with MI-90 bracing
Vertical girder	
1x	MI-90 girder See point "11"
1x	MIC-C90-AA connector 304825
Contains connectors and all through bolts	
2x	HST3-R M12x105 30/10 2105869
Bracing include connectors	
1x	MIC-U-MA 304806
incl. all connectivity material	
1x	MI-90 girder See point "11"
1x	MIC-CU-MA 304828
incl. all connectivity material	
2x	HST3-R M12x105 30/10 2105869

Application description

MI/MIQ System - L-tree On Concrete

General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application



Product lines

MI/MIQ System

Anchors

Accessories

Base material

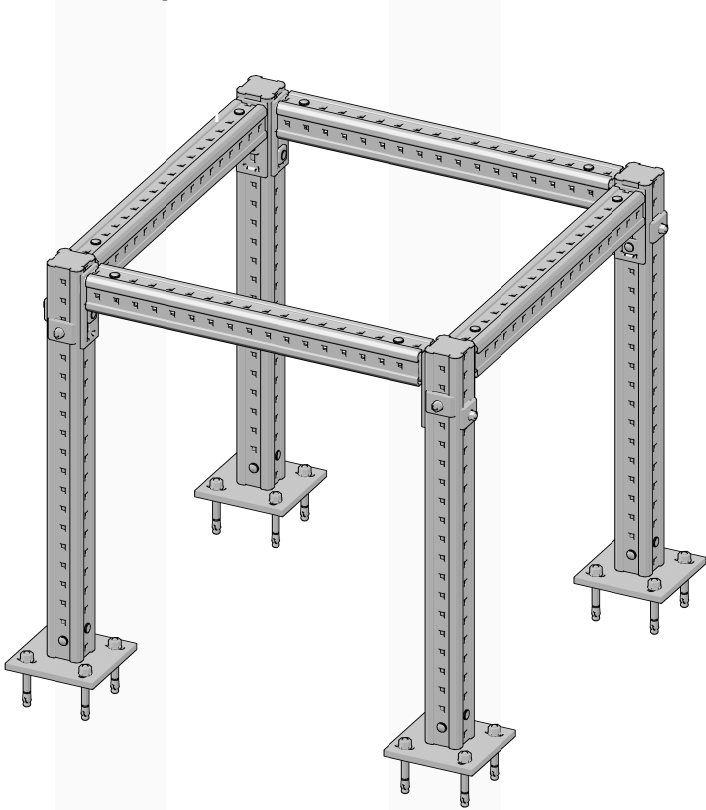
Concrete

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MI System - Floor 3D Cube On Concrete - Options

Horizontal MI-90 Options

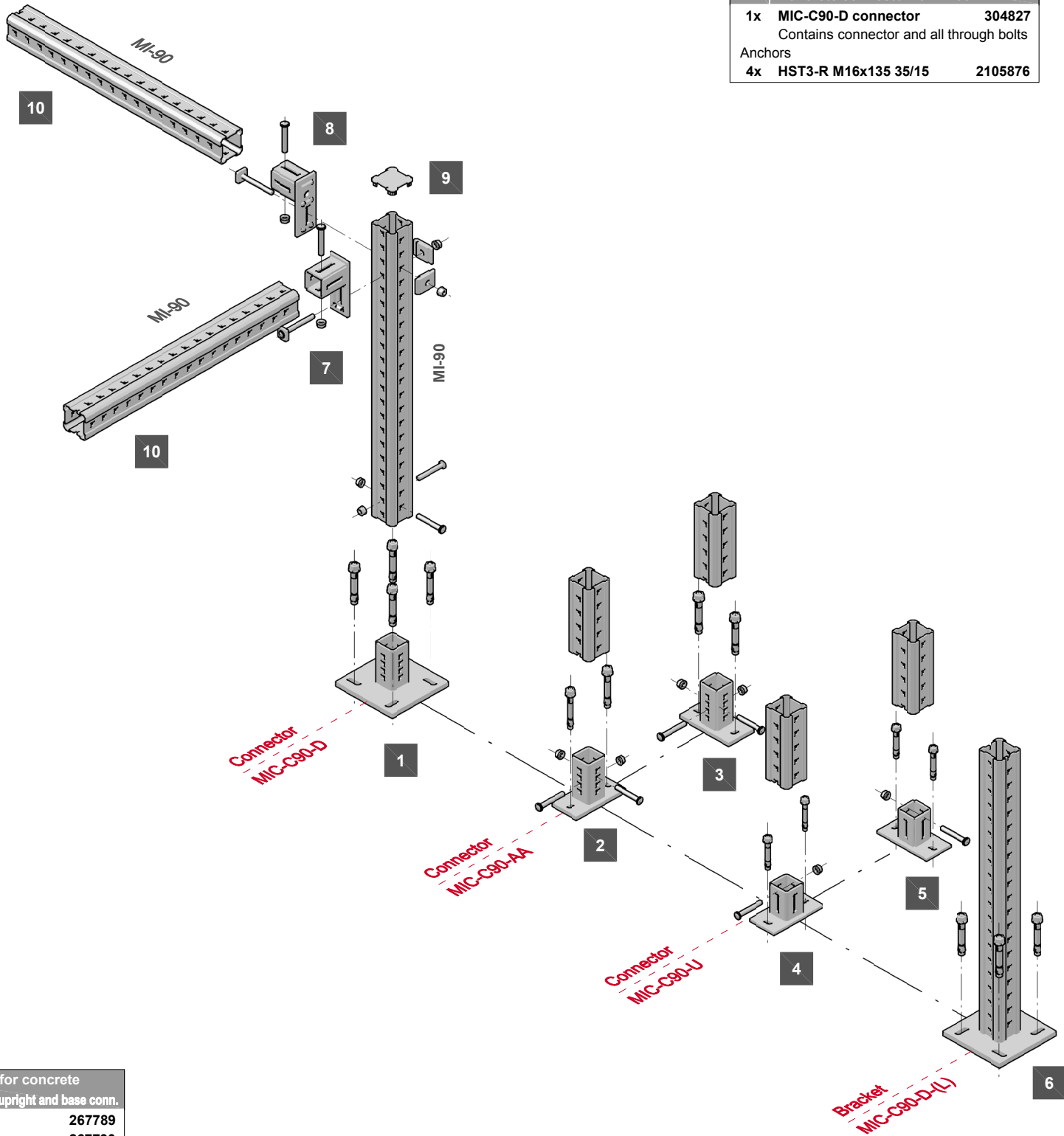


7	Connector MIC-90-U MI-90 fixed on MI-90
8	Connector MIC-90-U MI-90 fixed on MI-90
1x	<b>MIC-90-U connector</b> 304803 Contains connectors, all through bolts, back plate and lock nut

9	Plastic end cap MIA-EC-90 End cap for MIQ-90
1x	<b>MIA-EC-90 plastic endcap</b> 432077

10	Girders MI-90
	MI-90 3m girder 304798
	MI-90 6m girder 304799

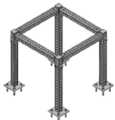
6	Brackets MIC-C90-D for concrete Bracket instead of vertical upright and base conn.
1x	<b>MIC-C90-D-500</b> 267789
	MIC-C90-D-750 267790
	MIC-C90-D-1000 267791
	MIC-C90-D-1500 267792
	MIC-C90-D-2000 267793
Anchors	
4x	<b>HST3-R M16x135 35/15</b> 2105876



1	Connector MIC-C90-D Concrete connector for MI-90
1x	<b>MIC-C90-D connector</b> 304827 Contains connector and all through bolts
Anchors	
4x	<b>HST3-R M16x135 35/15</b> 2105876

2	Connector MIC-C90-AA Concrete connector for MI-90
3	Connector MIC-C90-AA Concrete connector for MI-90
1x	<b>MIC-C90-AA connector</b> 304825 contains connectors and all through bolts
Anchors	
2x	<b>HST3-R M12x115 40/20</b> 2105870

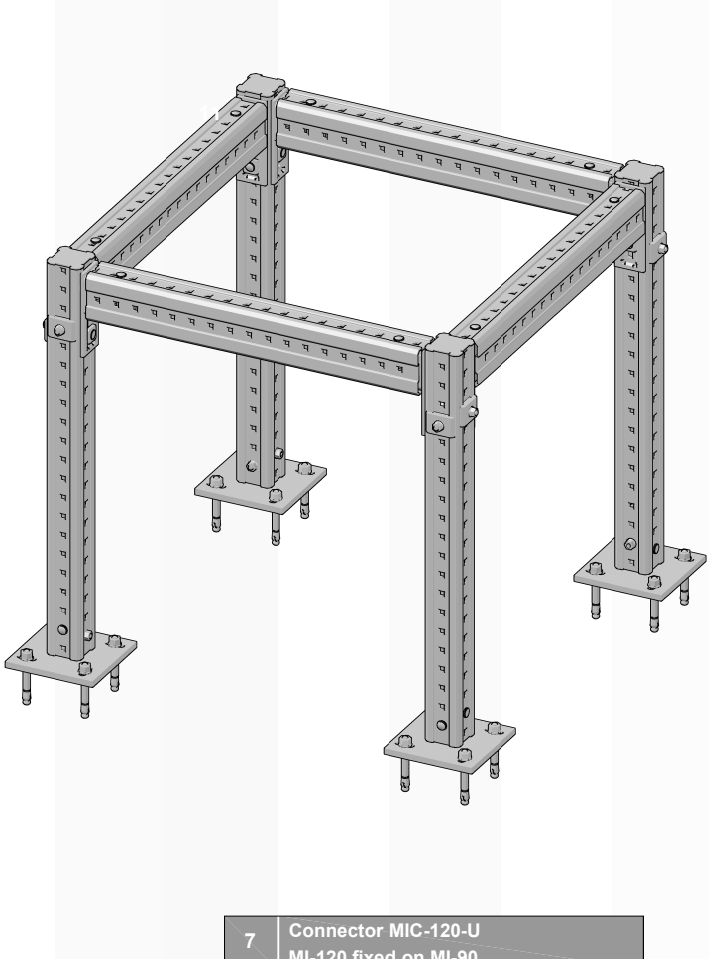
4	Connector MIC-C90-U Concrete connector for MI-90
5	Connector MIC-C90-U Concrete connector for MI-90
1x	<b>MIC-C90-U connector</b> 304826 contains connectors and all through bolts
Anchors	
2x	<b>HST3-R M12x115 30/10</b> 2105869

Application description	Application	Product lines	Base material
MI System - Floor 3D Cube On Concrete		MI System	Concrete
General comments		Accessories	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations			

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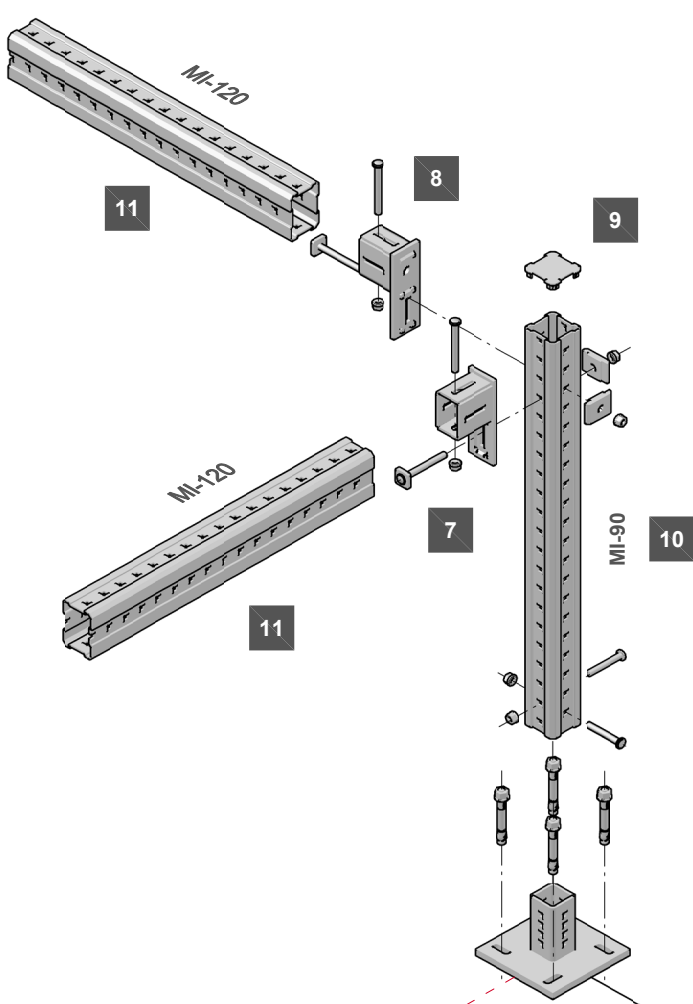
MI System - Floor 3D Cube On Concrete- Options

Horizontal MI-120 Options



7	Connector MIC-120-U MI-120 fixed on MI-90	
8	Connector MIC-120-U MI-120 fixed on MI-90	
1x	MIC-120-U connector Contains connectors, all through bolts, back plate and lock nut	304804

6	Brackets MIC-C90-D for concrete Bracket instead of vertical upright and base conn.	
1x	MIC-C90-D-500 MIC-C90-D-750 MIC-C90-D-1000 MIC-C90-D-1500 MIC-C90-D-2000	267789 267790 267791 267792 267793
Anchors		
4x	HST3-R M16x135 35/15	2105876



9	Plastic end cap MIA-EC-90 End cap for MIQ-90	
1x	MIA-EC-90 plastic endcap	432077

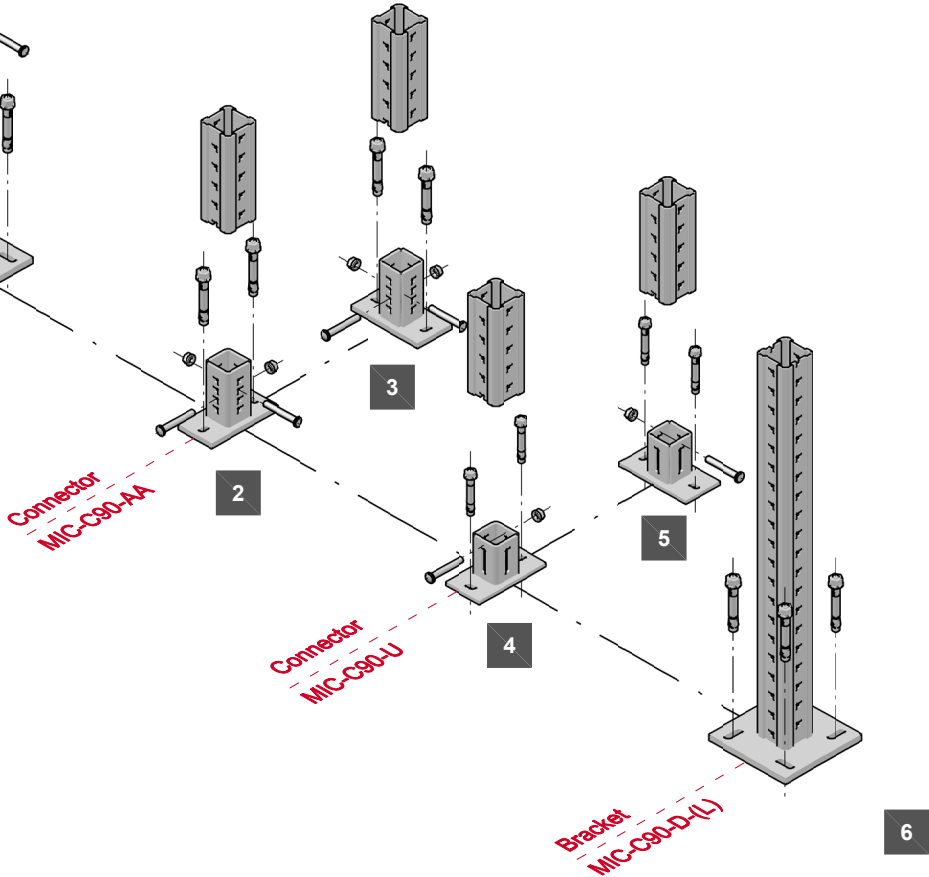
10	Girders MI-90	
	MI-90 3m girder	304798
	MI-90 6m girder	304799

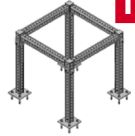
11	Girders MI-120	
	MI-120 3m girder	304800
	MI-120 6m girder	304801

1	Connector MIC-C90-D Concrete connector for MI-90	
1x	MIC-C90-D connector Contains connector and all through bolts	304827
Anchors		
4x	HST3-R M16x135 35/15	2105876

2	Connector MIC-C90-AA Concrete connector for MI-90	
3	Connector MIC-C90-AA Concrete connector for MI-90	
1x	MIC-C90-AA connector contains connectors and all through bolts	304825
Anchors		
2x	HST3-R M12x115 40/20	2105870

4	Connector MIC-C90-U Concrete connector for MI-90	
5	Connector MIC-C90-U Concrete connector for MI-90	
1x	MIC-C90-U connector contains connectors and all through bolts	304826
Anchors		
2x	HST3-R M12x115 30/10	2105869

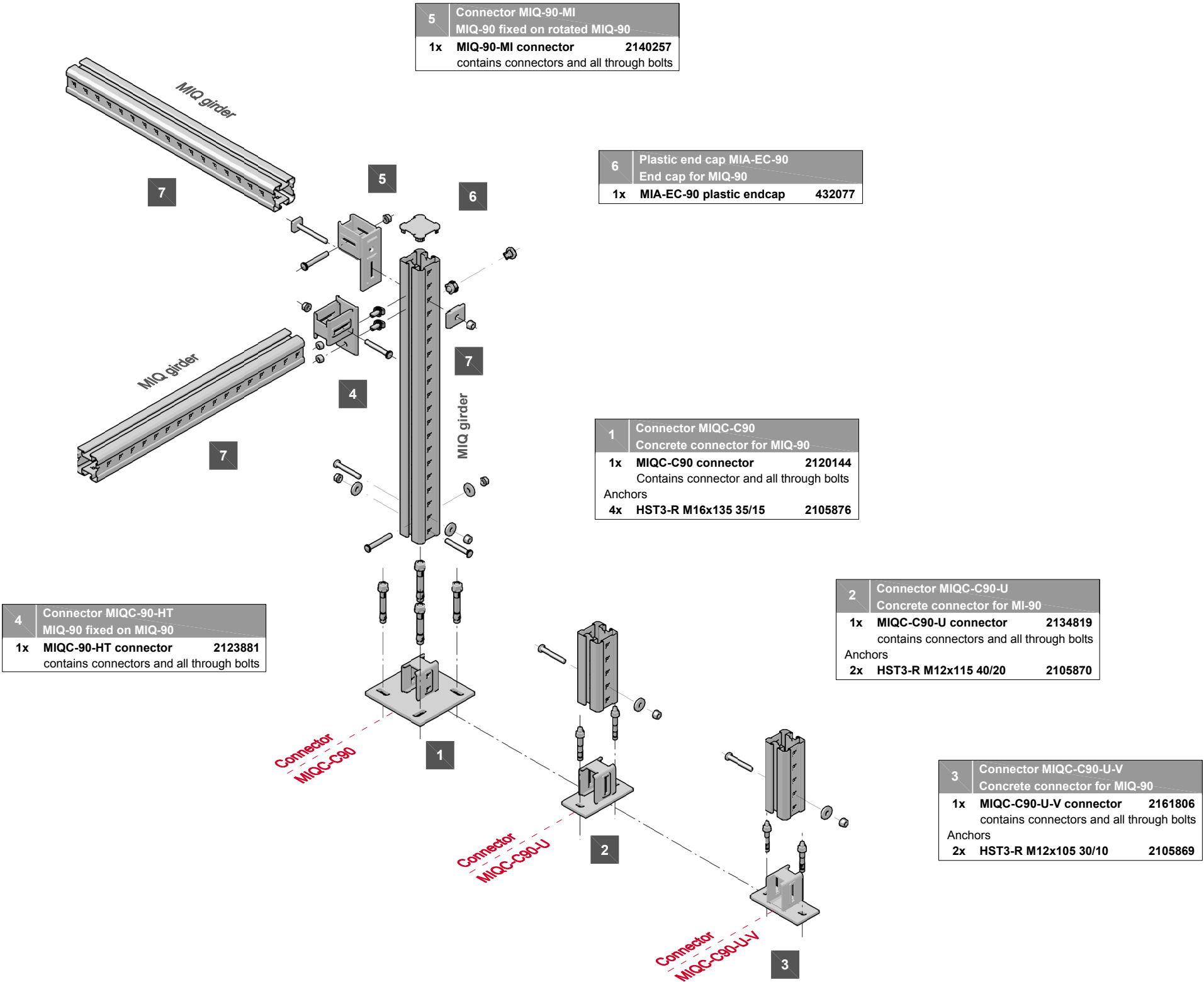
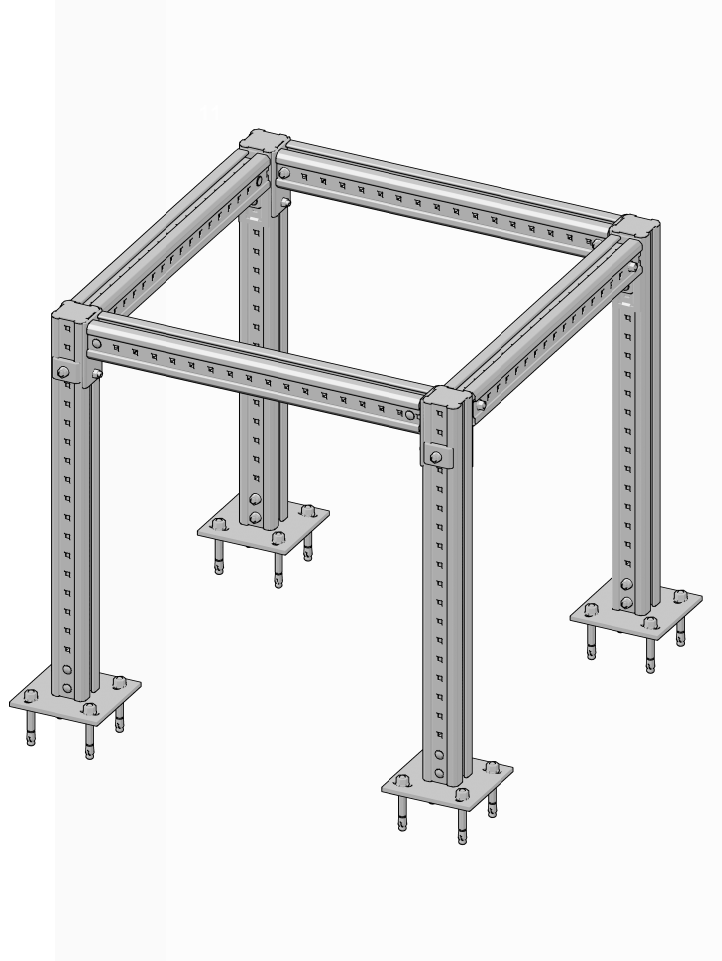



Application description	Application	Product lines	Base material
MI System - Floor 3D Cube On Concrete		MI System	Concrete
General comments		Accessories	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations			

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MIQ System - Floor 3D Cube On Concrete - Options

MIQ-90 Options

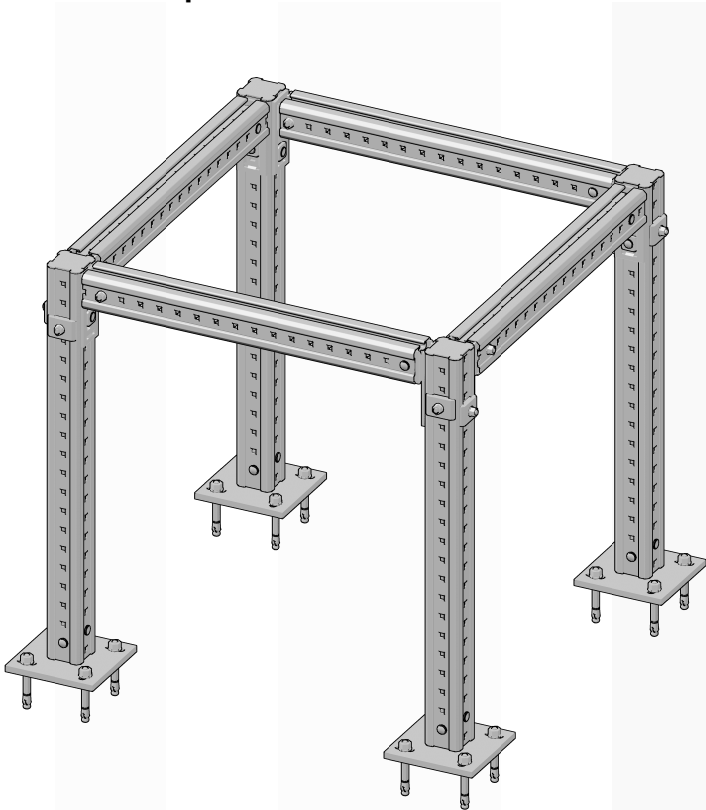


Application description		Application	Product lines	Base material
MIQ System - 3D Cube On Concrete			MIQ System	Concrete
General comments			Accessories	
<ul style="list-style-type: none"><li>• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>				

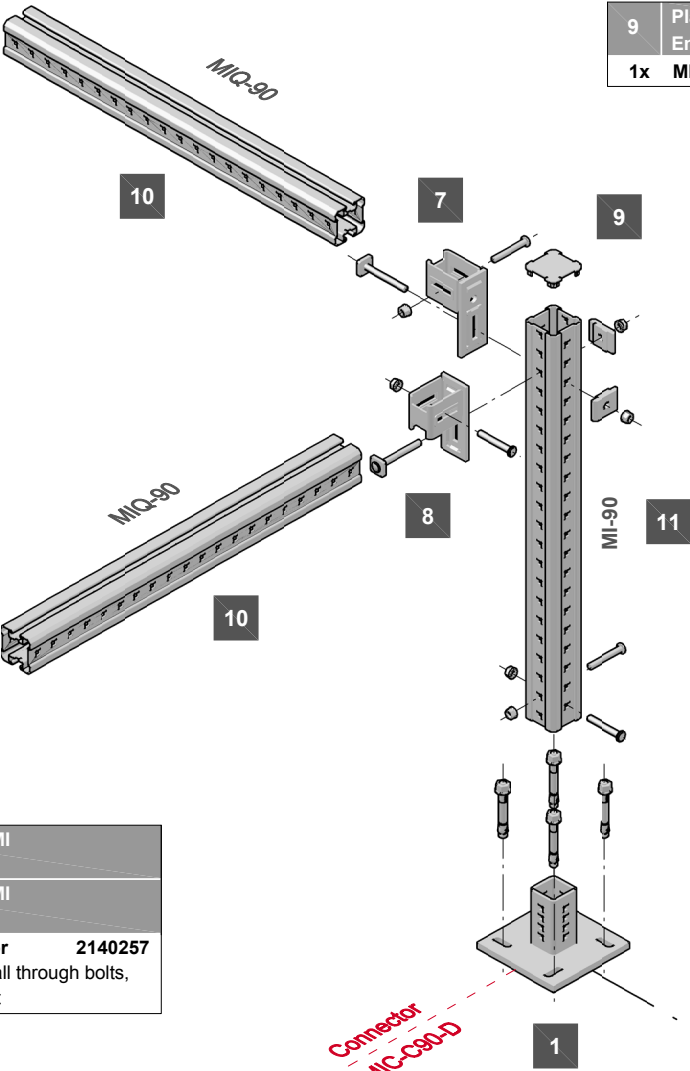
Hilti strongly advises customers to verify the respective product application for the intended use by consulting a structural engineer and making the necessary calculations to ensure compliance with the applicable norms and standards. Failure to consult and heed the advice of a structural engineer will free Hilti from any liability. It is essential that the product is used strictly in accordance with the applicable Hilti instructions for use, within the application limits specified in the Hilti technical data sheets, technical specifications and supporting product literature, and that the relevant application limits are not exceeded at any time. All rights reserved by Hilti Corporation. Duplication, utilization and/or publication of drawings contained in this manual are not permitted unless expressly agreed by Hilti Corporation.

MI/MIQ System - Floor 3D Cube On Concrete - Options

Horizontal MIQ-90 Options



7	Connector MIQC-90-MI MIQ-90 fixed on MI-90	
8	Connector MIQC-90-MI MIQ-90 fixed on MI-90	
1x	MIQC-90-MI connector	2140257
Contains connectors, all through bolts, back plate and lock nut		



9	Plastic end cap MIA-EC-90 End cap for MIQ-90	
1x	MIA-EC-90 plastic endcap	432077

1	Connector MIC-C90-D Concrete connector for MI-90	
1x	MIC-C90-D connector	304827
Contains connector and all through bolts		
Anchors		
4x	HST3-R M16x135 35/15	2105876

2	Connector MIC-C90-AA Concrete connector for MI-90	
3	Connector MIC-C90-AA Concrete connector for MI-90	
1x	MIC-C90-AA connector	304825
contains connectors and all through bolts		
Anchors		
2x	HST3-R M12x115 40/20	2105870

4	Connector MIC-C90-U Concrete connector for MI-90	
5	Connector MIC-C90-U Concrete connector for MI-90	
1x	MIC-C90-U connector	304826
contains connectors and all through bolts		
Anchors		
2x	HST3-R M12x115 30/10	2105869

6	Brackets MIC-C90-D for concrete Bracket instead of vertical upright and base conn.	
1x	MIC-C90-D-500	267789
	MIC-C90-D-750	267790
	MIC-C90-D-1000	267791
	MIC-C90-D-1500	267792
	MIC-C90-D-2000	267793
Anchors		
4x	HST3-R M16x135 35/15	2105876

10	Girders MIQ-90	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

11	Girders MI-90	
	MI-90 3m girder	304798
	MI-90 6m girder	304799

Application description

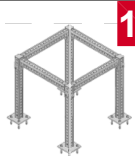
MI/MIQ System - Floor 3D Cube

General comments

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Application



Product lines

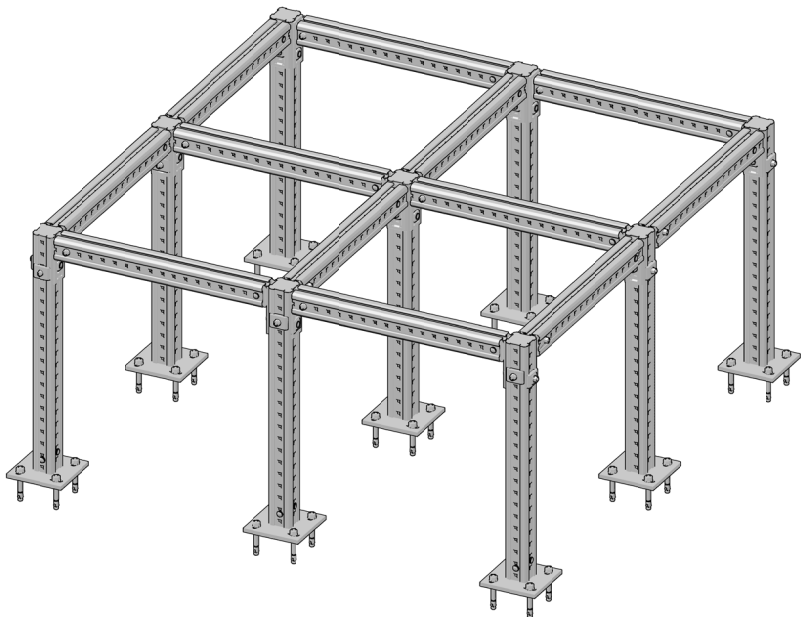
MI/MIQ System  
Accessories

Base material

Concrete

MI/MIQ System - Floor 3D Cube More Fields On Concrete - Options

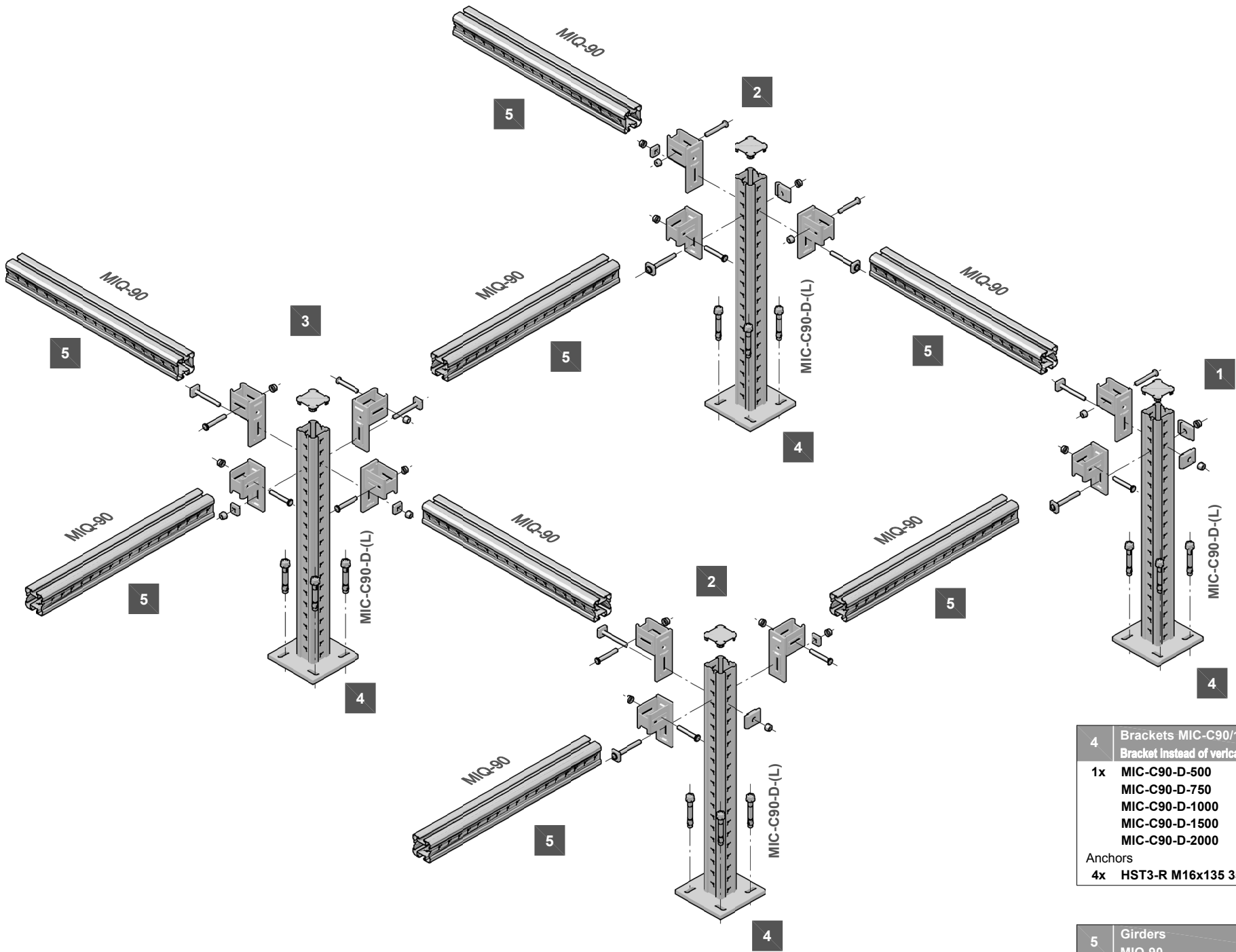
Horizontal MIQ-90 Options



1	Node with 2 girders - corner MIQ-90 fixed on MIC-C90 bracket	
2x	MIQ-90 girder	Various
1x	MIC-C90 bracket	Various
2x	MIQC-90-MI connector	2140257
	incl. all connectivity material	
1x	MIA-EC-90 plastic endcap	432077

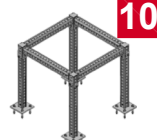
2	Node with 3 girders MIQ-90 fixed on MIC-C90 bracket	
3x	MIQ-90 girder	Various
1x	MIC-C90 bracket	Various
3x	MIQC-90-MI connector	2140257
	1x MIA-EH90 + 2x MIA-EH-P + 1x M12-F-SL-WS 3/4" will remain unused	
1x	MIA-TP toothed plate	305707
1x	MIA-EC-90 plastic endcap	432077

3	Node with 4 girders MIQ-90 fixed on MIC-C90 bracket	
4x	MIQ-90 girder	Various
1x	MIC-C90 bracket	Various
4x	MIQC-90-MI connector	2140257
	2x MIA-EH90 + 4x MIA-EH-P + 2x M12-F-SL-WS 3/4" will remain unused	
2x	MIA-TP toothed plate	305707
1x	MIA-EC-90 plastic endcap	432077



4	Brackets MIC-C90/120-D for concrete Bracket instead of vertical upright and base conn.	
1x	MIC-C90-D-500	267789
	MIC-C90-D-750	267790
	MIC-C90-D-1000	267791
	MIC-C90-D-1500	267792
	MIC-C90-D-2000	267793
Anchors		
4x	HST3-R M16x135 35/15	2105876

5	Girders MIQ-90	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

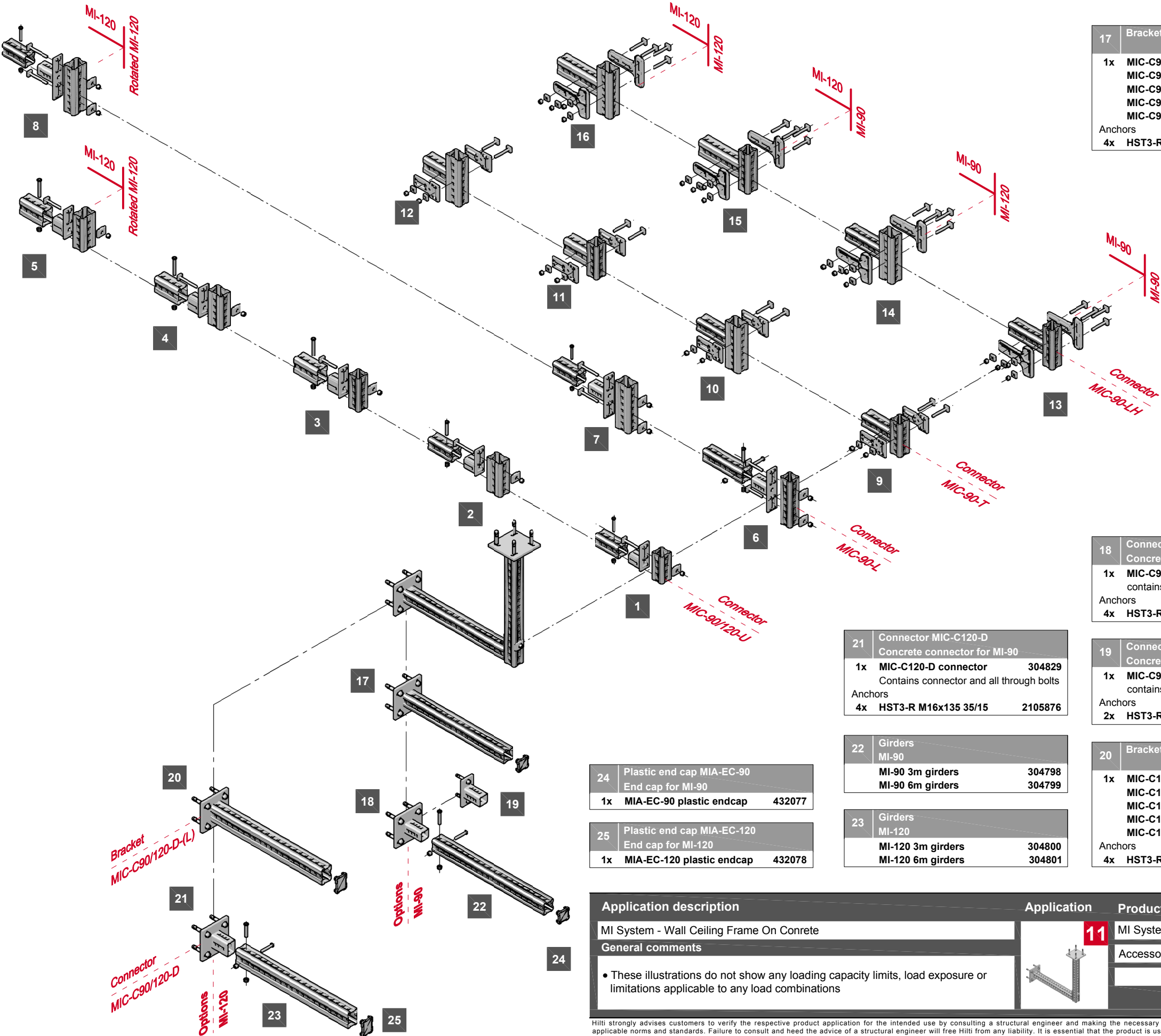
Application description	Application	Product lines	Base material
MI/MIQ System - Floor 3D Cube		MI/MIQ System	Concrete
General comments		Accessories	
<ul style="list-style-type: none"><li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>			

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MI System - Wall Ceiling Frame On Concrete - Options

1	Connector MIC-U MI-90 fixed on MI-90	
1x	MIC-90-U incl. all connectivity material	304803
2	Connector MIC-U MI-90 fixed on MI-120	
1x	MIC-90-U incl. all connectivity material	304803
1x	MIA-EH120 easy screw the original MIA-EH 90 from the package will remain unused	304888
4	Connector MIC-U MI-120 fixed on MI-120	
1x	MIC-120-U incl. all connectivity material	304804
1x	MIA-EH120 easy screw the original MIA-EH 90 from the package will remain unused	304888
3	Connector MIC-U MI-120 fixed on rotated MI-120	
5	Connector MIC-U MI-120 fixed on rotated MI-120	
1x	MIC-120-U incl. all connectivity material	304804
6	Connector MIC-L MI-90 fixed on MI-90	
8	Connector MIC-L MI-90 fixed on rotated MI-120	
1x	MIC-90-L incl. all connectivity material	304805
7	Connector MIC-L MI-90 fixed on MI-120	
1x	MIC-90-L incl. all connectivity material	304805
2x	MIA-EH120 easy screw the original MIA-EH 90 from the package will remain unused	304888
9	Connector MIC-T MI-90 fixed on MI-90	
10	Connector MIC-T MI-90 fixed on MI-120	
11	Connector MIC-T MI-120 fixed on MI-90	
12	Connector MIC-T MI-120 fixed on MI-120	
1x	MIC-T Incl. all connectivity material	304807
13	Connector MIC-90-LH MI-90 fixed on MI-90	
14	Connector MIC-90-LH MI-90 fixed on MI-120	
15	Connector MIC-90-LH MI-120 fixed on MI-90	
16	Connector MIC-90-LH MI-120 fixed on MI-120	
Angle does not include all connectivity material		
1x	MIC-90-LH	2048107
Connectivity material ordered separately		
4x	MIA-EH90 easy hand screw	304887
4x	MIA-TP serrated plate	305707
4x	M12-F-SL-WS ¾" lock nut	382897



17	Brackets MIC-C90-D for concrete	
1x	MIC-C90-D-500	267789
	MIC-C90-D-750	267790
	MIC-C90-D-1000	267791
	MIC-C90-D-1500	267792
	MIC-C90-D-2000	267793
Anchors		
4x	HST3-R M16x135 35/15	2105876

18	Connector MIC-C90-D Concrete connector for MI-90	
1x	MIC-C90-D connector contains connectors and all through bolts	304827
Anchors		
4x	HST3-R M16x135 35/15	2105876

19	Connector MIC-C90-AA Concrete connector for MI-90	
1x	MIC-C90-AA connector contains connectors and all through bolts	304825
Anchors		
2x	HST3-R M12x115 40/20	2105870

21	Connector MIC-C120-D Concrete connector for MI-90	
1x	MIC-C120-D connector Contains connector and all through bolts	304829
Anchors		
4x	HST3-R M16x135 35/15	2105876

22	Girders MI-90	
	MI-90 3m girders	304798
	MI-90 6m girders	304799

23	Girders MI-120	
	MI-120 3m girders	304800
	MI-120 6m girders	304801

20	Brackets MIC-C120-D for concrete	
1x	MIC-C120-D-500	270468
	MIC-C120-D-750	270469
	MIC-C120-D-1000	270470
	MIC-C120-D-1500	270471
	MIC-C120-D-2000	270472
Anchors		
4x	HST3-R M16x135 35/15	2105876

24	Plastic end cap MIA-EC-90 End cap for MI-90	
1x	MIA-EC-90 plastic endcap	432077

25	Plastic end cap MIA-EC-120 End cap for MI-120	
1x	MIA-EC-120 plastic endcap	432078

Application description

MI System - Wall Ceiling Frame On Concrete

General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application

Product lines

Base material

11	MI System	Concrete
	Accessories	

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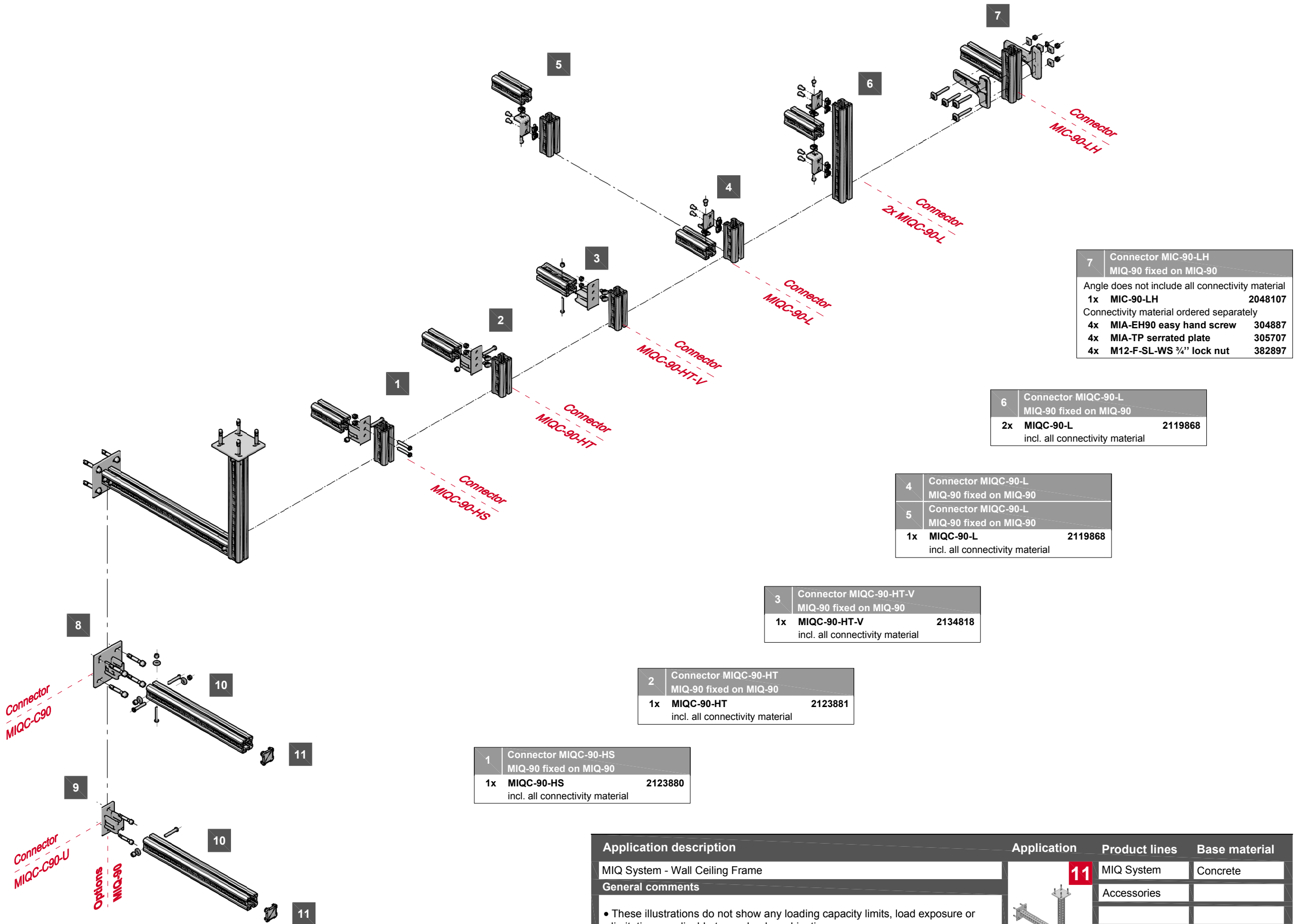
MIQ System - Wall Ceiling Frame On Concrete - Options

8	Connector MIQC-C90 Concrete connector for MIQ-90
1x	MIQC-C90 connector 2120144 contains connectors and all through bolts
4x	HST3-R M16x135 35/15 2105876

9	Connector MIQC-C90-U Concrete connector for MIQ-90
1x	MIQC-C90-U connector 2134819 contains connectors and all through bolts
2x	HST3-R M12x105 30/10 2105869

10	Girders MI-90
	MIQ-90 3m girder 2119866
	MIQ-90 6m girder 2119867

11	Plastic end cap MIA-EC-90 End cap for MIQ-90
1x	MIA-EC-90 plastic endcap 432077



Application description	Application	Product lines	Base material
MIQ System - Wall Ceiling Frame		MIQ System	Concrete
General comments		Accessories	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations			

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# MI System - Wall Ceiling Rod On Concrete - Options

10	Brackets MIC-C120-D for concrete	
1x	MIC-C120-D-500	270468
	MIC-C120-D-750	270469
	MIC-C120-D-1000	270470
	MIC-C120-D-1500	270471
	MIC-C120-D-2000	270472
Anchors		
4x	HST3-R M16x135 35/15	2105876

11	Connector MIC-120-D Concrete connector for MI-90	
1x	MIC-C120-D connector contains connectors and all through bolts	304829
4x	HST3-R M16x135 35/15 stud anchor	2105876

12	Girders MI-90	
	MI-90 3m girder	304798
	MI-90 6m girder	304799

13	Girders MI-120	
	MI-120 3m girder	304800
	MI-120 6m girder	304801

14	Plastic end cap MIA-EC-90 End cap for MI-90	
1x	MIA-EC-90 plastic endcap	432077

15	Plastic end cap MIA-EC-120 End cap for MI-120	
1x	MIA-EC-120 plastic endcap	432078

7	Brackets MIC-C90-D for concrete	
1x	MIC-C90-D-500	267789
	MIC-C90-D-750	267790
	MIC-C90-D-1000	267791
	MIC-C90-D-1500	267792
	MIC-C90-D-2000	267793
Anchors		
4x	HST3-R M16x135 35/15	2105876

8	Connector MIC-C90-D Concrete connector for MI-90	
1x	MIC-C90-D connector contains connectors and all through bolts	304827
4x	HST3-R M16x135 35/15	2105876

9	Connector MIC-C90-AA Concrete connector for MI-90	
1x	MIC-C90-AA connector contains connectors and all through bolts	304825
Anchors		
2x	HST3-R M12x115 40/20	2105870

## US only

6	Trapeze rod connector MIC-TRC 3/4" For hanging on 3/4" threaded rods	
2x	MIC-TRC M20-3/4" incl. through bolt, bottom plate and upper washer	233858
1x	3/4" x 10' threaded rod	309390
Anchor		
1x	HDI 3/4" drop-in anchor	336429
1x	3/4" washer	411760
1x	3/4" hexagon nut	411755
or		
1x	KB-TZ 1/2" x 3-3/4" anchor	387512
1x	3/4" rod coupler	411750
or		
1x	HCI-MD 3/4" cast-in anchor	2057328
or		
1x	HCI-WF 3/4" cast-in anchor	2057323
Note:		
Threaded rods, washer, nut and anchors are galvanized!		

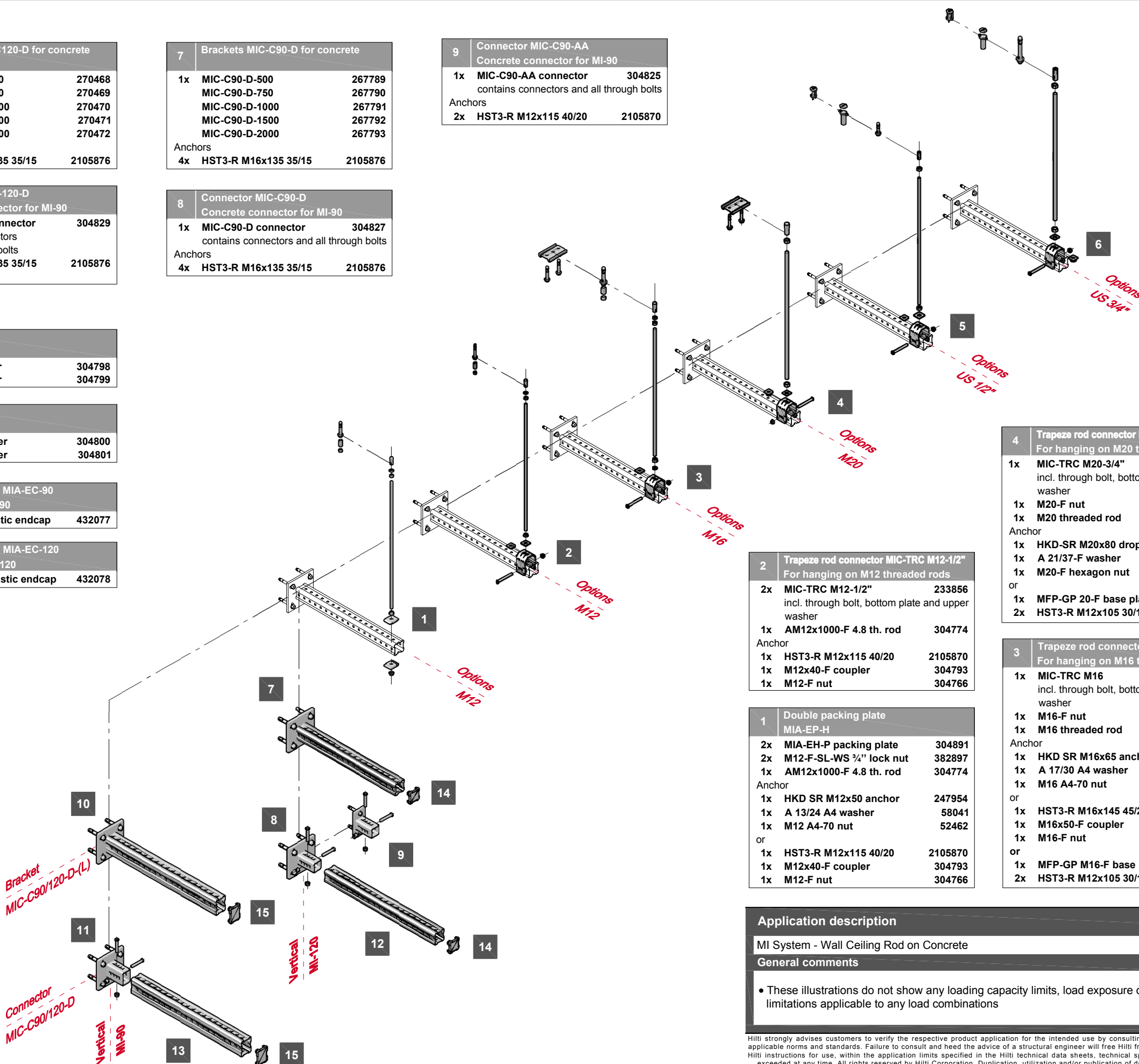
## US only


5	Trapeze rod connector MIC-TRC 1/2" For hanging on 1/2" threaded pipes	
1x	MIC-TRC M12-1/2" incl. through bolt, bottom plate and upper washer	233856
1x	1/2" x 10' threaded rod	309388
Anchor		
1x	HDI+ 1/2" drop-in anchor	2080046
1x	1/2" washer	411758
1x	1/2" hexagon nut	411753
or		
1x	KB-TZ 1/2" x 3-3/4" anchor	387512
1x	1/2" rod coupler	411748
or		
1x	HCI-MD 1/2" cast-in anchor	2057326
or		
1x	HCI-WF 1/2" cast-in anchor	2057321
Note: Threaded rods, washer, nut and anchors are galvanized!		

M12 threaded rods		
1x	AM12x1000-F 4.8 t-rod	304774
	AM12x2000-F 4.8 t-rod	304775

M16 threaded rods		
1x	AM16x1000-F 4.8 t-rod	304776
	AM16x2000-F 4.8 t-rod	304777

M20 threaded rod		
1x	AM20x1000-F 4.8 t-rod	304778



Application description		Application	Product lines	Base material
MI System - Wall Ceiling Rod on Concrete			MI System	Concrete
General comments			Accessories	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations				

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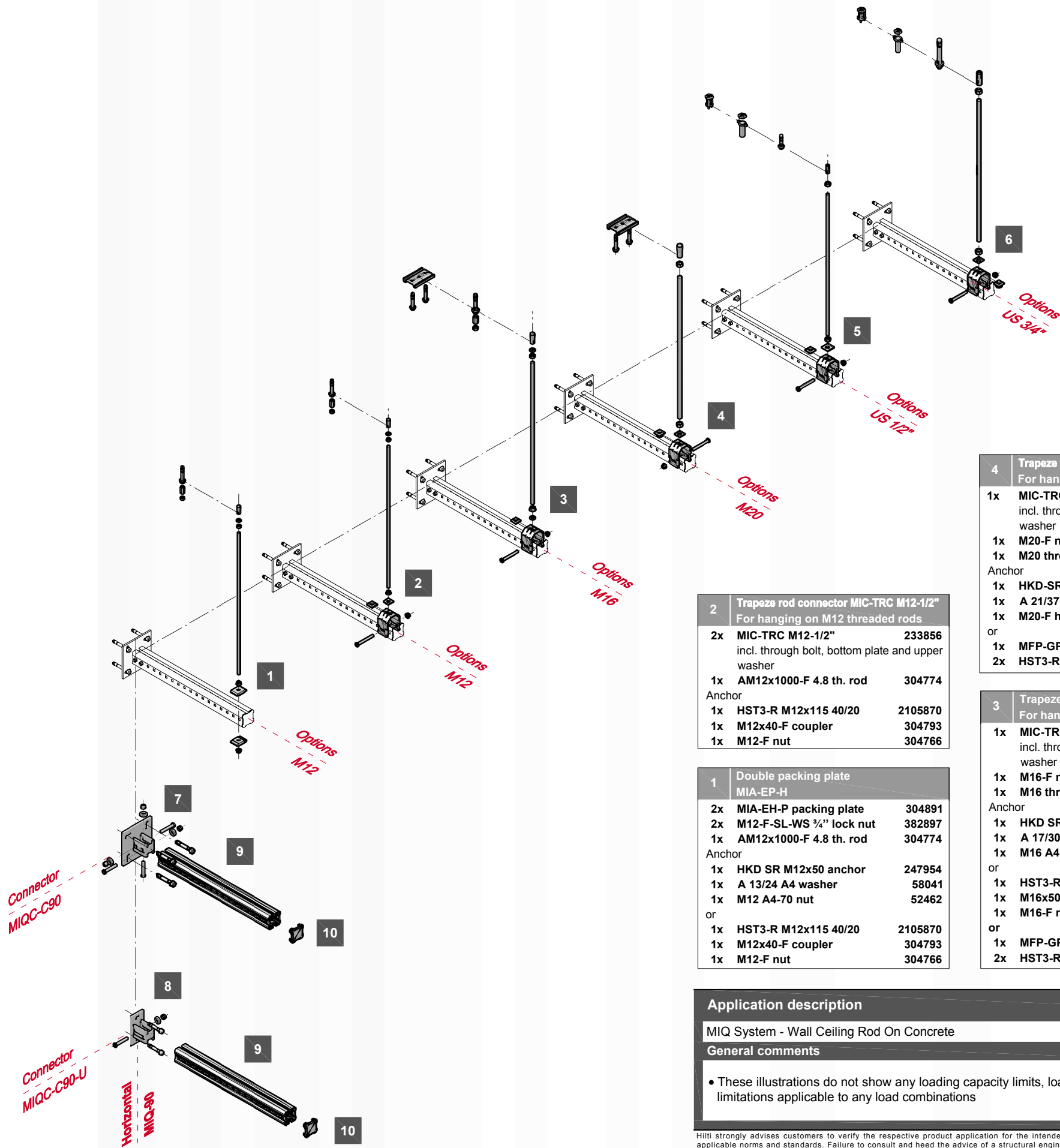
MIQ System - Wall Ceiling Rod On Concrete - Options

7	Connector MIQC-C90 Concrete connector for MIQ-90	
1x	MIQC-C90 connector contains connectors and all through bolts	2120144
4x	HST3-R M16x135 35/15 stud anchor	2105876

8	Connector MIQC-C90-U Concrete connector for MI-90	
1x	MIQC-C90-U connector contains connectors and all through bolts	2134839
2x	HST3-R M12x105 30/10 Anchors	2105869

9	Girders MIQ-90	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

10	Plastic end cap MIA-EC-90 End cap for MIQ-90	
1x	MIA-EC-90 plastic endcap	432077



US Only

6	Trapeze rod connector MIC-TRC 3/4"	
	For hanging on 3/4" threaded rods	
2x	MIC-TRC M20-3/4"	233858
	incl. through bolt, bottom plate and upper washer	
1x	3/4" x 10' threaded rod	309390
	Anchor	
1x	HDI 3/4" drop-in anchor	336429
1x	3/4" washer	411760
1x	3/4" hexagon nut	411755
	or	
1x	KB-TZ 1/2" x 3-3/4" anchor	387512
1x	3/4" rod coupler	411750
	or	
1x	HCI-MD 3/4" cast-in anchor	2057328
	or	
1x	HCI-WF 3/4" cast-in anchor	2057323
	Note:	
	Threaded rods, washer, nut and anchors are galvanized!	

US Only

5	Trapeze rod connector MIC-TRC 1/2"	
	For hanging on 1/2" threaded pipes	
1x	MIC-TRC M12-1/2"	233856
	incl. through bolt, bottom plate and upper washer	
1x	1/2" x 10' threaded rod	309388
	Anchor	
1x	HDI+ 1/2" drop-in anchor	2080046
1x	1/2" washer	411758
1x	1/2" hexagon nut	411753
	or	
1x	KB-TZ 1/2" x 3-3/4" anchor	387512
1x	1/2" rod coupler	411748
	or	
1x	HCI-MD 1/2" cast-in anchor	2057326
	or	
1x	HCI-WF 1/2" cast-in anchor	2057321
	Note:	
	Threaded rods, washer, nut and anchors are galvanized!	

	M12 threaded rods	
1x	AM12x1000-F 4.8 t-rod	304774
	AM12x2000-F 4.8 t-rod	304775

	M16 threaded rods	
1x	AM16x1000-F 4.8 t-rod	304776
	AM16x2000-F 4.8 t-rod	304777

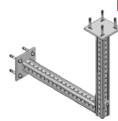
	M20 threaded rod	
1x	AM20x1000-F 4.8 t-rod	304778

2	Trapeze rod connector MIC-TRC M12-1/2"	
	For hanging on M12 threaded rods	
2x	MIC-TRC M12-1/2"	233856
	incl. through bolt, bottom plate and upper washer	
1x	AM12x1000-F 4.8 th. rod	304774
	Anchor	
1x	HST3-R M12x115 40/20	2105870
1x	M12x40-F coupler	304793
1x	M12-F nut	304766

1	Double packing plate MIA-EP-H	
2x	MIA-EH-P packing plate	304891
2x	M12-F-SL-WS 3/4" lock nut	382897
1x	AM12x1000-F 4.8 th. rod	304774
	Anchor	
1x	HKD SR M12x50 anchor	247954
1x	A 13/24 A4 washer	58041
1x	M12 A4-70 nut	52462
	or	
1x	HST3-R M12x115 40/20	2105870
1x	M12x40-F coupler	304793
1x	M12-F nut	304766

4	Trapeze rod connector MIC-TRC M20-3/4"	
	For hanging on M20 threaded rods	
1x	MIC-TRC M20-3/4"	233858
	incl. through bolt, bottom plate and upper washer	
1x	M20-F nut	304768
1x	M20 threaded rod	Various
	Anchor	
1x	HKD-SR M20x80 drop-in an.	247956
1x	A 21/37-F washer	2008399
1x	M20-F hexagon nut	216469
	or	
1x	MFP-GP 20-F base plate	304251
2x	HST3-R M12x105 30/10 an.	2105869

3	Trapeze rod connector MIC-TRC M16	
	For hanging on M16 threaded rods	
1x	MIC-TRC M16	233857
	incl. through bolt, bottom plate and upper washer	
1x	M16-F nut	304767
1x	M16 threaded rod	Various
	Anchor	
1x	HKD SR M16x65 anchor	247955
1x	A 17/30 A4 washer	387989
1x	M16 A4-70 nut	52463
	or	
1x	HST3-R M16x145 45/25	2105877
1x	M16x50-F coupler	304794
1x	M16-F nut	304767
	or	
1x	MFP-GP M16-F base plate	304279
2x	HST3-R M12x105 30/10 an.	2105869

Application description	Application	Product lines	Base material
MIQ System - Wall Ceiling Rod On Concrete		11 MIQ System	Concrete
General comments		Accessories	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations			

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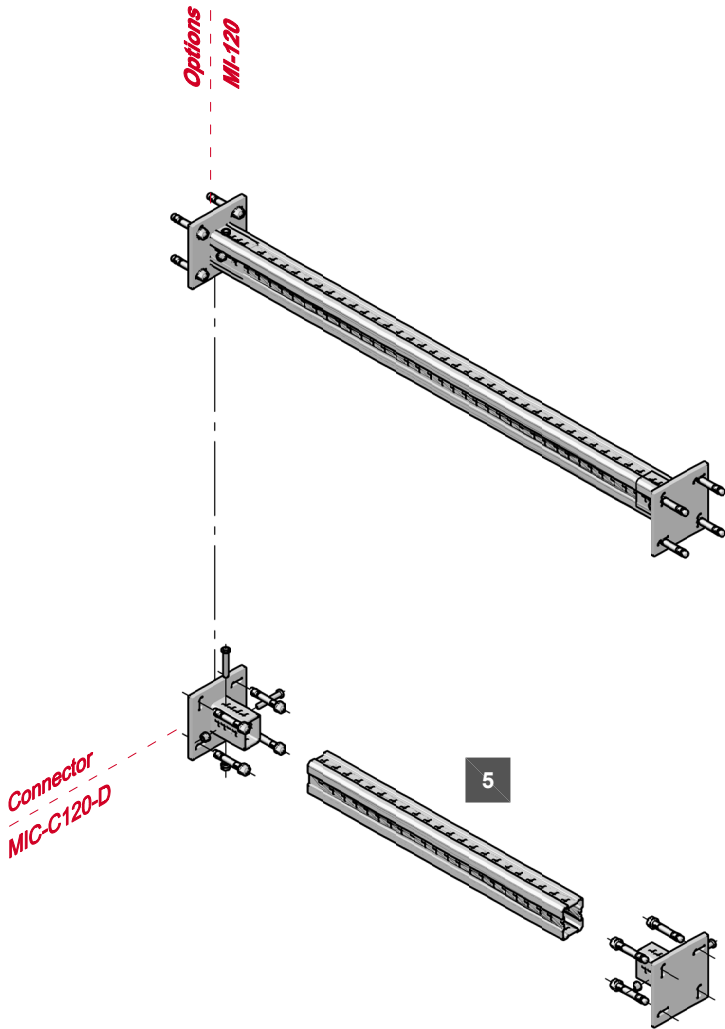
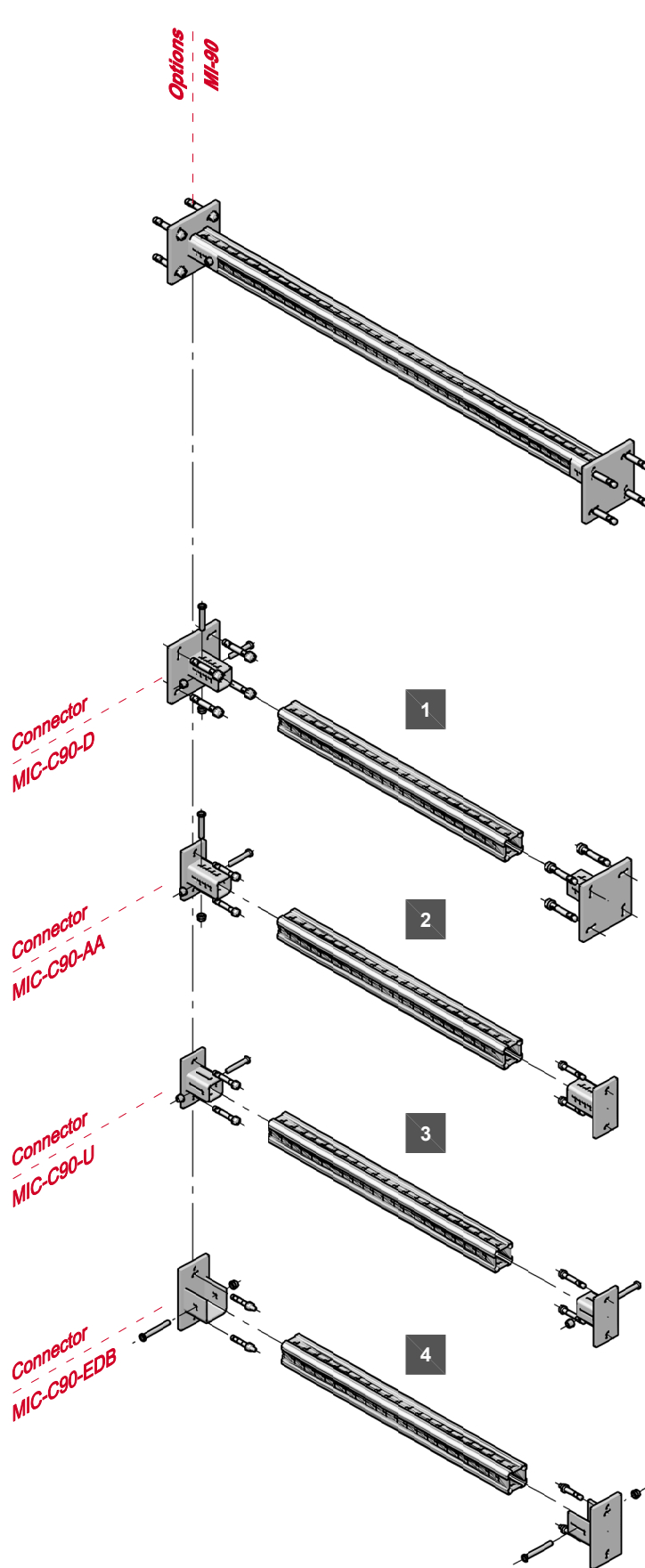
MI System - Wall-wall - Sub-structure Girder On Concrete - Options

1	Connector MIC-C90-D Concrete connector for MI-90		
2x	MIC-C90-D connector	304827	
contains connectors and all through bolts (2x MIA-EH90 + 2x M12-F-SL-WS 3/4" will be unused)			
1x	MI-90 girder	Various	
Anchors			
8x	HST3-R M16x135 35/15	2105876	

2	Connector MIC-C90-AA Concrete connector for MI-90		
2x	MIC-C90-AA connector	304825	
contains connectors and all through bolts (2x MIA-EH90 + 2x M12-F-SL-WS 3/4" will be unused)			
1x	MI-90 girder	Various	
Anchors			
4x	HST3-R M12x115 40/20	2105870	

3	Connector MIC-C90-U Concrete connector for MI-90		
2x	MIC-C90-U connector	304826	
contains connectors and all through bolts			
1x	MI-90 girder	Various	
Anchors			
4x	HST3-R M12x105 30/10	2105869	


4	Connector MIC-C90-EDB Concrete connector for MI-90		
1x	MIC-C90-EDB base plates	2149279	
Sell in pair. Include 1x base plate with square hole and 1x base plate with longitudinal hole. Including screws and nuts for connection MI girder to base plates.			
1x	MI girder	Various	
Anchors			
4x	HST3-R M12x115 40/20	2105870	



5	Connector MIC-C120-D Concrete connector for MI-120		
2x	MIC-C120-D connector	304829	
Contains connector and all through bolts (1x MIA-EH90 + 1x MIA-EH120 + 2x M12-F-SL-WS 3/4" will be unused)			
1x	MI-120 girder	Various	
Anchors			
8x	HST3-R M16x135 35/15	2105876	

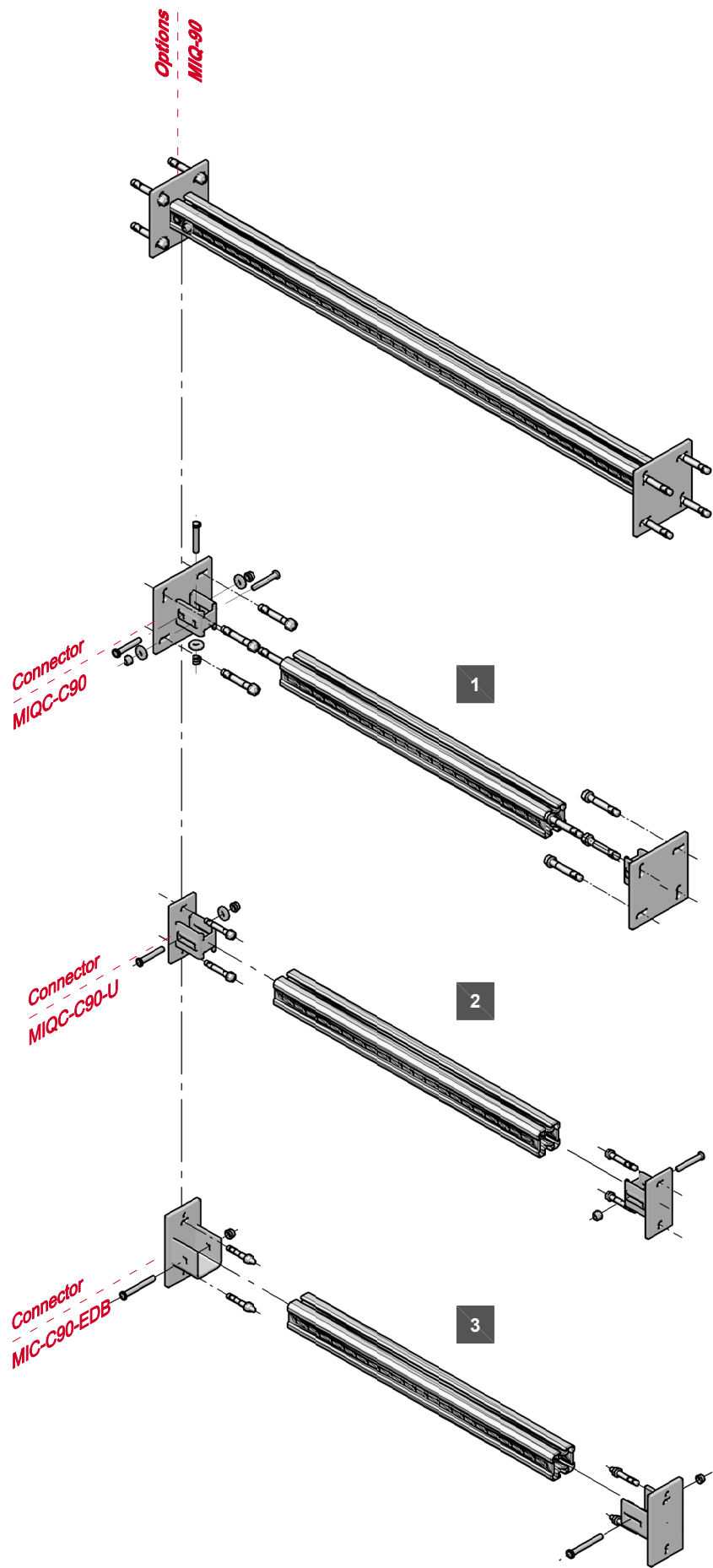
Girders	
MI-90	
MI-90 3m girders	304798
MI-90 6m girders	304799

Girders	
MI-120	
MI-120 3m girders	304800
MI-120 6m girders	304801

Application description		Application	Product lines	Base material
MI System - Wall-wall - Sub-structure Girder On Concrete			MI System	Concrete
General comments			Accessories	
<ul style="list-style-type: none"><li>• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>				

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MIQ System - Wall-wall - Sub-structure Girder On Concrete - Options




1	Connector MIQC-C90 Concrete connector for MIQ-90	
2x	MIQC-C90 connector	2120144
contains connectors and all through bolts (2x M1A-EH90 + 2x M12-F-SL-WS 3/4" will be unused)		
1x	MIQ-90 girder	Various
Anchors		
8x	HST3-R M16x135 35/15	2105876

2	Connector MIQC-C90-U Concrete connector for MIQ-90	
2x	MIQC-C90-U connector	2134819
contains connectors and all through bolts (1x M1A-EH90 + 1x M12-F-SL-WS 3/4" will be unused)		
1x	MIQ-90 girder	Various
Anchors		
4x	HST3-R M12x105 30/10	2105869

3	Connector MIC-C90-EDB Concrete connector for MIQ-90	
1x	MIC-C90-EDB base plates	2149279
Sell in pair. Include 1x base plate with square hole and 1x base plate with longitudinal hole. Including screws and nuts for connection MI girder to base plates.		
1x	MIQ-90 girder	Various
Anchors		
4x	HST3-R M12x115 40/20	2105870

Girders	
MI-90	
MIQ-90 3m girder	2119866
MIQ-90 6m girder	2119867

Application description		Application	Product lines	Base material
MIQ System - Wall-wall - Sub-structure Girder On Concrete - Options		 <div>12</div>	MIQ System	Concrete
General comments			Accessories	
<ul style="list-style-type: none"><li>• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>				

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MI System - Floor Ceiling Frame On Concrete- Options

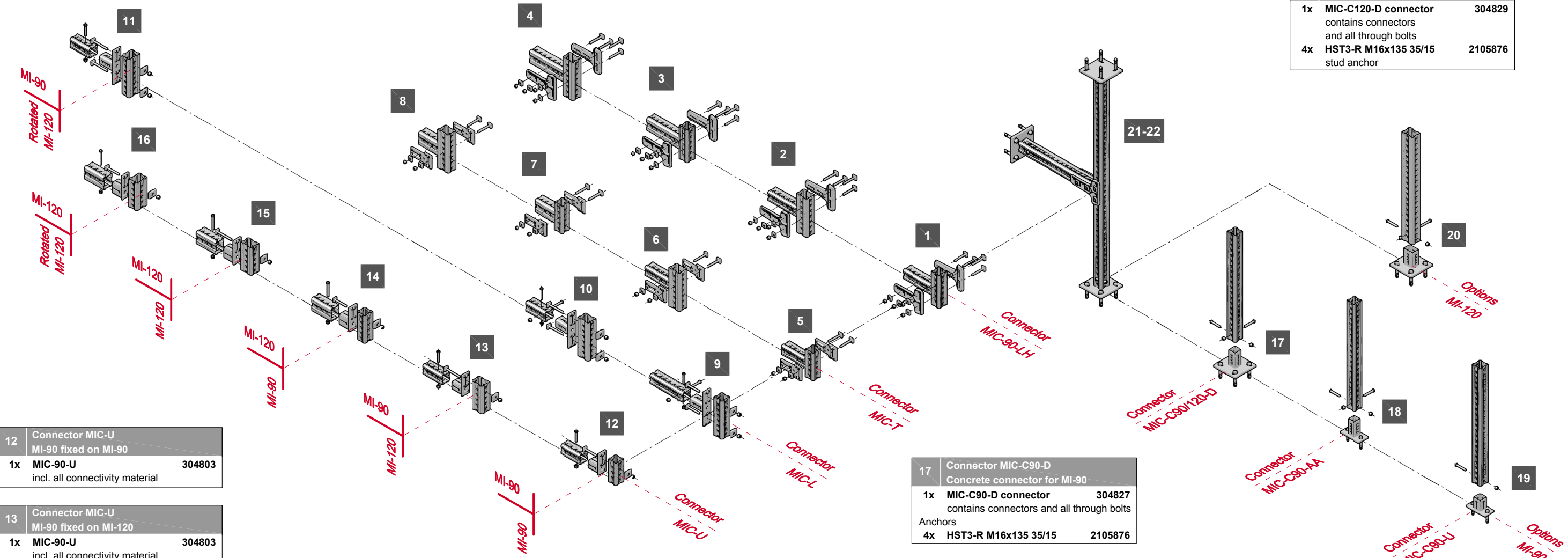
5	Connector MIC-T MI-90 fixed on MI-90
6	Connector MIC-T MI-90 fixed on MI-120
7	Connector MIC-T MI-120 fixed on MI-90
8	Connector MIC-T MI-120 fixed on MI-120
1x	MIC-T Incl. all connectivity material
	304807

1	Connector MIC-90-LH MI-90 fixed on MI-90
2	Connector MIC-90-LH MI-90 fixed on MI-120
3	Connector MIC-90-LH MI-120 fixed on MI-90
4	Connector MIC-90-LH MI-120 fixed on MI-120
Angle does not include all connectivity material	
1x	MIC-90-LH
	2048107
Connectivity material ordered separately	
4x	MIA-EH90 easy hand screw
	304887
4x	MIA-TP serrated plate
	305707
4x	M12-F-SL-WS 3/4" lock nut
	382897

21	Girders MI-90
	MI-90 3m girder
	304798
	MI-90 6m girder
	304799

22	Girders MI-120
	MI-120 3m girder
	304800
	MI-120 6m girder
	304801

20	Connector MIC-120-D Concrete connector for MI-90
1x	MIC-C120-D connector contains connectors and all through bolts
	304829
4x	HST3-R M16x135 35/15 stud anchor
	2105876



12	Connector MIC-U MI-90 fixed on MI-90
1x	MIC-90-U incl. all connectivity material
	304803

13	Connector MIC-U MI-90 fixed on MI-120
1x	MIC-90-U incl. all connectivity material
	304803
1x	MIA-EH120 easy screw the original MIA-EH 90 from the package will remain unused
	304888

14	Connector MIC-U MI-120 fixed on MI-90
16	Connector MIC-U MI-120 fixed on rotated MI-120
1x	MIC-120-U incl. all connectivity material
	304804

15	Connector MIC-U MI-120 fixed on MI-120
1x	MIC-120-U incl. all connectivity material
	304804
1x	MIA-EH120 easy screw the original MIA-EH 90 from the package will remain unused
	304888


9	Connector MIC-L MI-90 fixed on MI-90
11	Connector MIC-L MI-90 fixed on rotated MI-120
1x	MIC-90-L incl. all connectivity material
	304805

10	Connector MIC-L MI-90 fixed on MI-120
1x	MIC-90-L incl. all connectivity material
	304805
2x	MIA-EH120 easy screw the original MIA-EH 90 from the package will remain unused
	304888

17	Connector MIC-C90-D Concrete connector for MI-90
1x	MIC-C90-D connector contains connectors and all through bolts
	304827
Anchors	
4x	HST3-R M16x135 35/15
	2105876

18	Connector MIC-C90-AA Concrete connector for MI-90
1x	MIC-C90-AA connector contains connectors and all through bolts
	304825
Anchors	
2x	HST3-R M12x115 40/20
	2105870

19	Connector MIC-C90-AA Concrete connector for MI-90
1x	MIC-C90-U connector contains connectors and all through bolts
	304826
Anchors	
2x	HST3-R M12x105 30/10
	2105869

Application description		Application	Product lines	Base material	
MI System - Floor Ceiling Frame On Concrete			13	MI System	Concrete
General comments				Anchors	
<ul style="list-style-type: none"><li>• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>				Accessories	

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MIQ System - Floor Ceiling Frame On Concrete- Options

1	Connector MIC-90-LH MIQ-90 fixed on MIQ-90
Angle does not include all connectivity material	
1x MIC-90-LH	2048107
Connectivity material ordered separately	
4x MIA-EH90 easy hand screw	304887
4x MIA-TP serrated plate	305707
4x M12-F-SL-WS ¾" lock nut	382897

2	Connector MIQC-90-L MIQ-90 fixed on MIQ-90
2x MIQC-90-L	2119868
incl. all connectivity material	

8	Connector MIQC-C90 Concrete connector for MIQ-90
1x MIQC-C90 connector	2120144
Contains connectors and all through bolts Anchors	
4x HST3-R M16x135 35/15	2105876

9	Connector MIQC-C90-U Concrete connector for MIQ-90
1x MIQC-C90-U connector	2134819
Contains connectors and all through bolts Anchors	
2x HST3-R M12x105 30/10	2105869

3	Connector MIQC-90-L MIQ-90 fixed on MIQ-90
4	Connector MIQC-90-L MIQ-90 fixed on MIQ-90
1x MIQC-90-L	2119868
incl. all connectivity material	

5	Connector MIQC-90-HT-V MIQ-90 fixed on MIQ-90
1x MIQC-90-HT-V	2134818
incl. all connectivity material	

6	Connector MIQC-90-HT MIQ-90 fixed on MIQ-90
1x MIQC-90-HT	2123881
incl. all connectivity material	

7	Connector MIQC-90-HS MIQ-90 fixed on MI-90
1x MIQC-90-HS	2123880
incl. all connectivity material	

10	Girders MIQ-90
MIQ-90 3m girder	2119866
MIQ-90 6m girder	2119867

Application description

MIQ System - Floor Ceiling Frame On Concrete

General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application

Product lines

Base material

13

MIQ System

Concrete

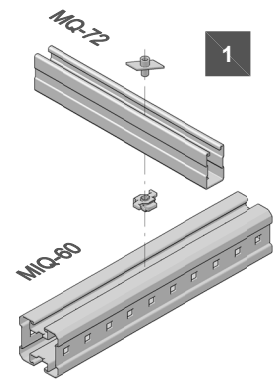
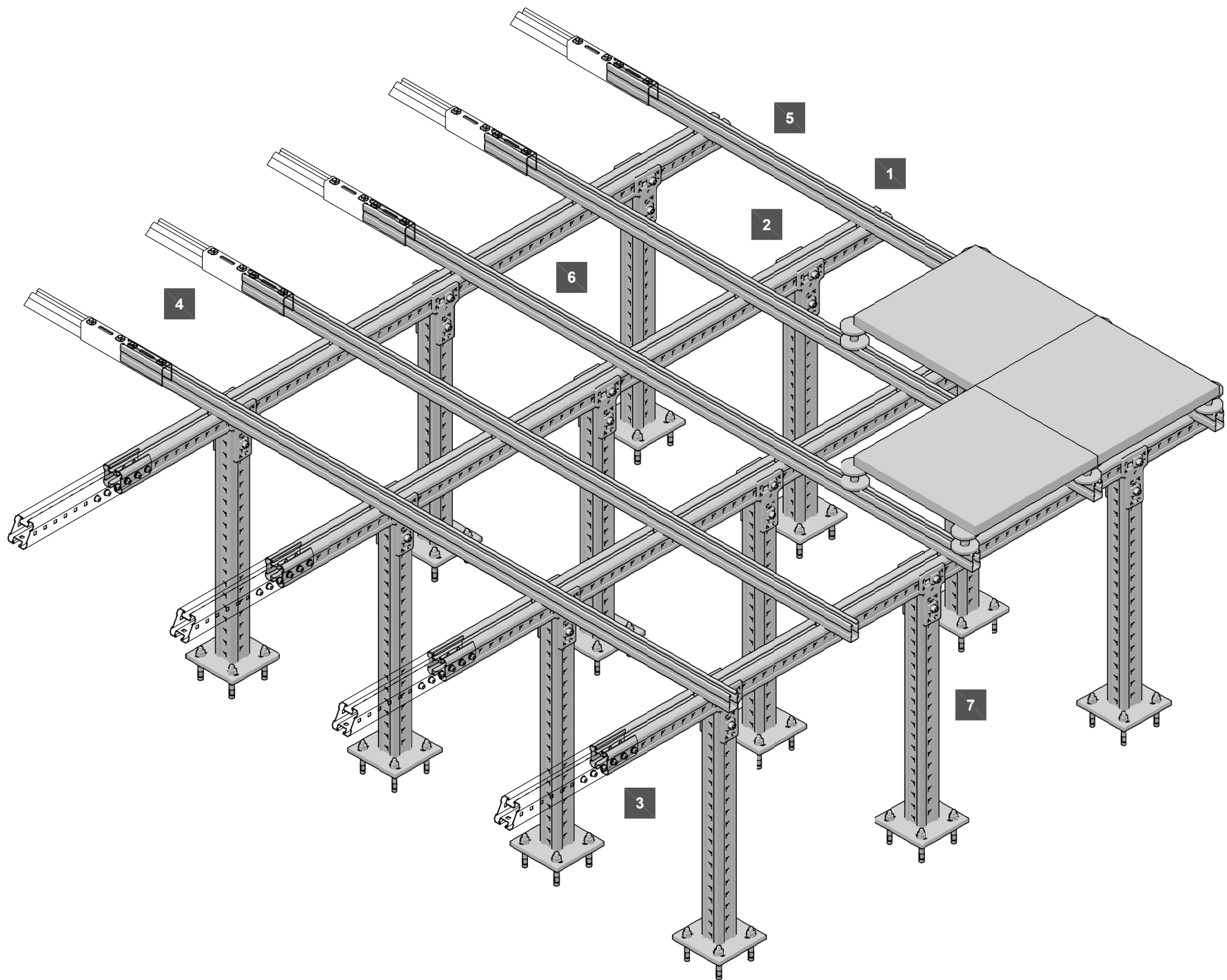
Anchors

Accessories

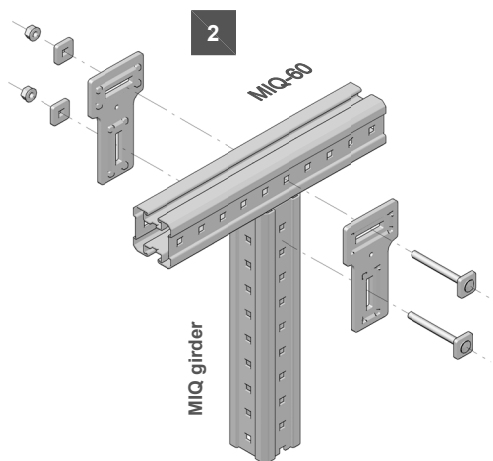
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MIQ/MQ System - Raised Floor - Options



1	Crossing upper MQ-72 channel with lower MIQ-90 girder	
1x	MQZ-S-F screw	2063162
1x	MIQM-M12 wingnut	2120275



2	Connector MIC-T MIQ-90 fixed on bracket MIC-C90	
1x	MIC-T Incl. all connectivity material	304807

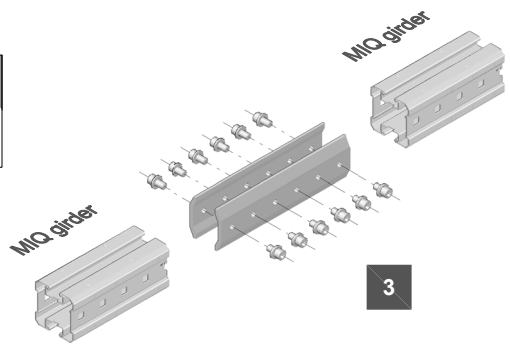
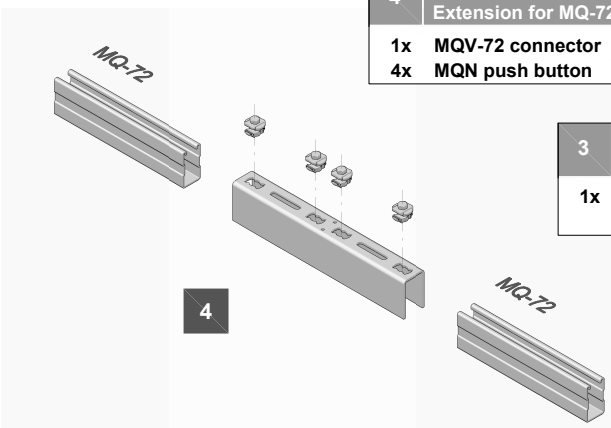
7	Brackets MIC-C90-D for concrete	
Bracket (Cantilever arm)		
1x	MIC-C90-D-500	267789
	MIC-C90-D-750	267790
	MIC-C90-D-1000	267791
	MIC-C90-D-1500	267792
	MIC-C90-D-2000	267793
Anchors		
4x	HST3-R M16x135 35/15	2105876

5	Channels MQ-72	
	MQ-72 3m channel	373797
	MQ-72 6m channel	369599

6	Girders MIQ-90	
	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867

4	Connector MQV-72 Extension for MQ-72	
1x	MQV-72 connector	286102
4x	MQN push button	369623

3	Connector MIQ-E Extension for MIQ-90	
1x	MIQ-E connector Incl. all connectivity material	2140259



Application description

MIQ/MQ System - Raised Floor On Concrete

General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application



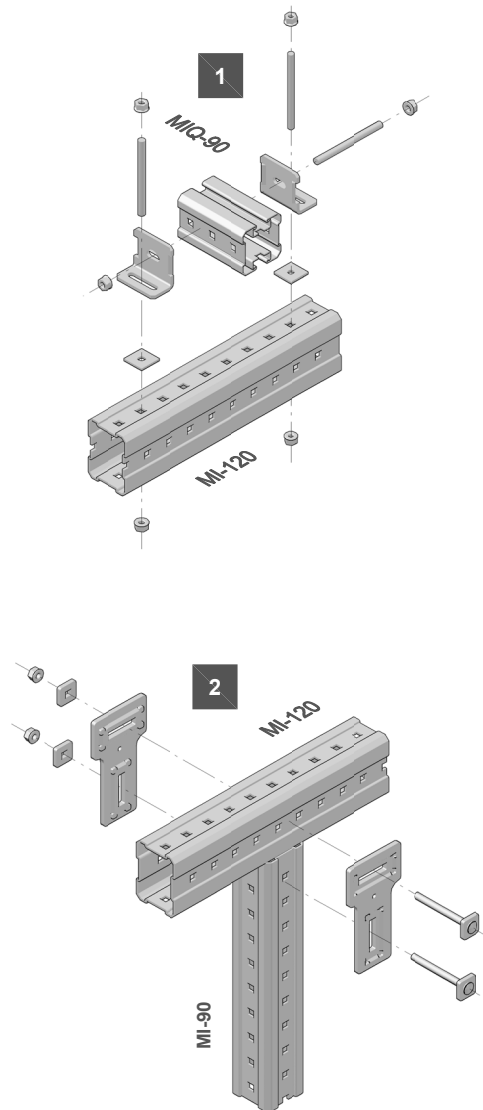
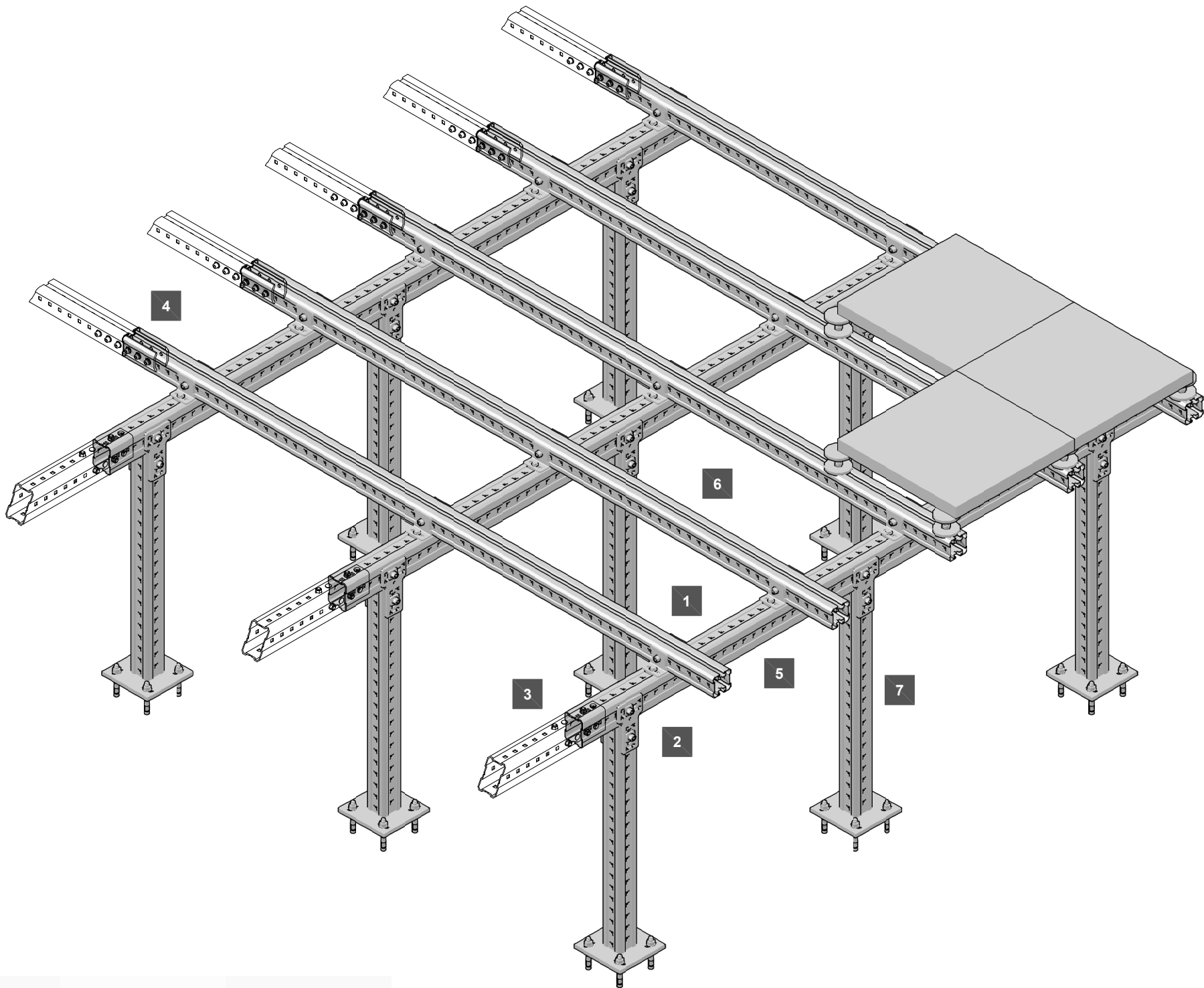
Product lines

14	MI/MIQ System	Concrete
	Anchors	
	Accessories	

Base material

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MI/MIQ System - Raised Floor - Options



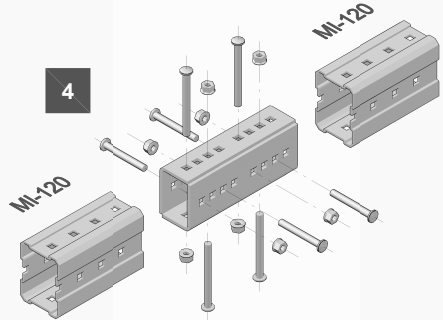
1	Crossing upper MIQ-90 girder with lower MI-120 girder		
Angles			
1x	MIC-UB 90-M12 U-bolt conn.	304831	
Sell in pair. Incl. connectivity material. Two screws will remain unused.			
Other parts			
1x	AM12x1000-F 4.8 th. rod	304774	
	AM12x2000-F 4.8 th. rod	304775	
3x piece of 150 mm lenght th. rod			
4x	M12-F-SL WS 3/4 lock nut	382897	

2	Connector MIC-T MI-120 fixed on bracket MIC-C90		
1x	MIC-T	304807	
Incl. all connectivity material			

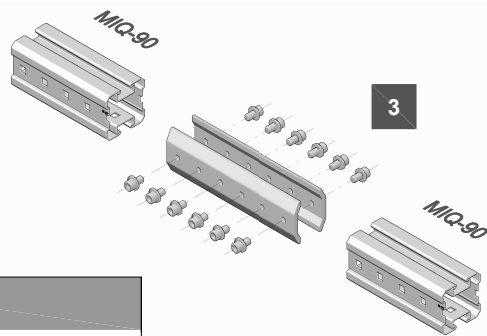
7	Brackets MIC-C90-D for concrete		
Bracket (Cantilever arm)			
1x	MIC-C90-D-500		267789
	MIC-C90-D-750		267790
	MIC-C90-D-1000		267791
	MIC-C90-D-1500		267792
	MIC-C90-D-2000		267793
Anchors			
4x	HST3-R M16x135 35/15		2105876

5	Girders MI-120		
	MI-120 3m girder	304800	
	MI-120 6m girder	304801	

6	Girders MIQ-90		
	MIQ-90 3m girder	2119866	
	MIQ-90 6m girder	2119867	



4	Connector MIC-120-E Extension for MI-120		
1x	MIC-120-E connector	304810	
Incl. all connectivity material			



3	Connector MIQC-E Extension for MIQ-90		
1x	MIQC-E connector	2140259	
Incl. all connectivity material			

Application description

MI/MIQ System - Raised Floor On Concrete

General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application



Product lines

MI/MIQ System  
Anchors  
Accessories

Base material

Concrete

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MI System - Overhead Grid On Concrete - Options

3	Bracing on concrete ceiling MQ channel fixed on MI bracket
Channel	
1x	MQ-21-D-F 3m channel 304107
	MQ-21-D-F 6m channel 304108
Brace connector	
2x	MQP-45-F brace connector 304164
4x	MQN-HDG plus push button 387779
1x	MIA-OH90 screw 304889
1x	M12-F-SL-WS 3/4" lock nut 382897
Anchor	
1x	HST3-R M12x105 30/10 2105869

2	Bracing between brackets MQ channel fixed on MI brackets
Channel	
1x	MQ-21-D-F 3m channel 304107
	MQ-21-D-F 6m channel 304108
Brace connector	
2x	MQP-45-F brace connector 304164
4x	MQN-HDG plus push button 387779
2x	MIA-OH90 screw 304889
2x	M12-F-SL-WS 3/4" lock nut 382897

5	MQ-41 channel fixed on sub-structure girder MI-120
Channel	
1x	MQ-41-F 3m channel 304099
	MQ-41-F 6m channel 304100
Plastic caps	
2x	MQZ-E41 end cap 369685
Connection between MQ channel and MI girder	
4x	MIA-OH120 easy hand screw 304890
4x	M12-F-SL-WS 3/4" lock nut 382897
Connection between MQ channel and suspended device	
2x	MQM-M12-F wing nut 304134
2x	M12x-25-F hex. screw 304789

1	Node with 2 horizontal girders MI-90 fixed on MIC-C90 bracket
2x	MI-90 girder Various
1x	MIC-C90 bracket Various
2x	MIC-90-U connector 304803
Contains connectors, all through bolts, back plate and lock nut	
1x	MIA-EC-90 plastic endcap 432077

4	Connection between primary 3D cube and sub-structure girder MI-120
Screws and nuts on primary 3D cube	
2x	MIA-EH90 easy hand screw 304887
2x	M12-F-SL-WS 3/4" lock nut 382897
Base plate	
1x	XXX base plate xxxxx
Screws and nuts on primary 3D cube	
2x	MIA-EH120 easy hand screw 304888
2x	M12-F-SL-WS 3/4" lock nut 382897

6	Girders MI-90
	MI-90 3m girders 304798
	MI-90 6m girders 304799

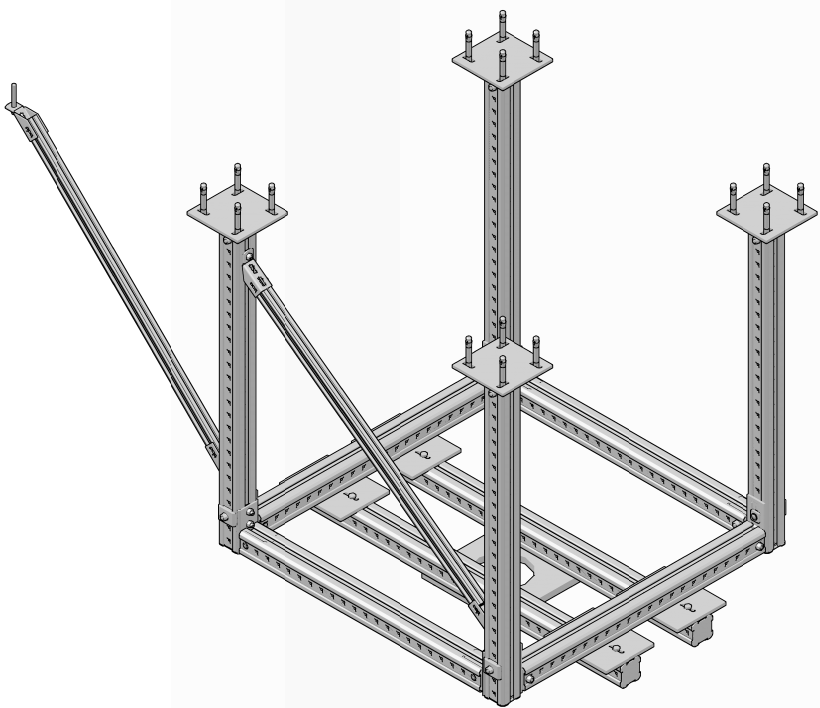
7	Girder MI-120 and plastic caps
Girder	
1x	MI-120 3m girders 304800
	MI-120 6m girders 304801
Plastic caps	
2x	MIA-EC-120 plastic endcap 432078

8	Brackets MIC-C90-D for concrete Bracket instead of vertical upright and base conn.
1x	MIC-C90-D-500 267789
	MIC-C90-D-750 267790
	MIC-C90-D-1000 267791
	MIC-C90-D-1500 267792
	MIC-C90-D-2000 267793
Anchors	
4x	HST3-R M16x135 35/15 2105876

Application description	Application	Product lines	Base material
MI System - Overhead Grid On Concrete		MI System	Concrete
General comments		Anchors	
<ul style="list-style-type: none"> <li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li> </ul>		Accessories	

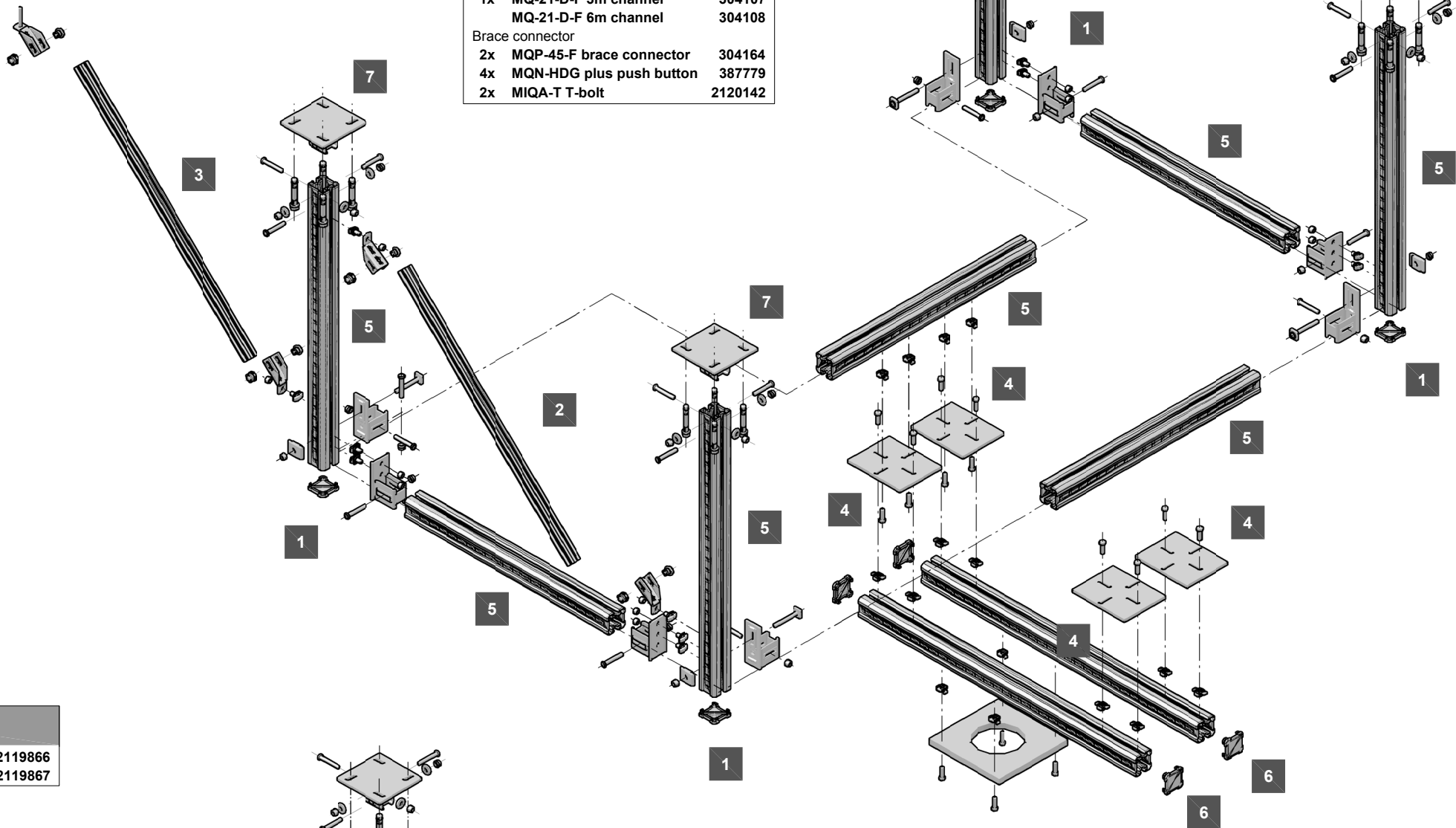
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MIQ System - Overhead Grid On Concrete - Options



3	Bracing on concrete ceiling MQ channel fixed on MIQ girder	
Channel		
1x	MQ-21-D-F 3m channel	304107
	MQ-21-D-F 6m channel	304108
Brace connector		
2x	MQP-45-F brace connector	304164
4x	MQN-HDG plus push button	387779
1x	MIQA-T T-bolt	2120142
Anchor		
1x	HST3-R M12x105 30/10	2105869

2	Bracing between brackets MQ channel fixed on MI brackets	
Channel		
1x	MQ-21-D-F 3m channel	304107
	MQ-21-D-F 6m channel	304108
Brace connector		
2x	MQP-45-F brace connector	304164
4x	MQN-HDG plus push button	387779
2x	MIQA-T T-bolt	2120142



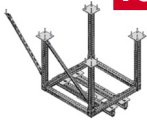
1	Node with 2 horizontal girders MIQ-90 fixed on MIQ-90 girder	
3x	MIQ-90 girder	Various
1x	MIQC-90-HT connector	2123881
	contains connectors and all through bolts	
1x	MIQ-90-MI connector	2140257
	contains connectors and all through bolts	
1x	MIA-EC-90 plastic endcap	432077

5	Girders MIQ-90	
	MIQ-90 3m girders	2119866
	MIQ-90 6m girders	2119867

4	Connection between primary 3D cube and sub-structure girder MIQ-90	
Screws and nuts for connection to primary 3D cube		
2x	MIQM-M12 wing nut	2120275
2x	M12x30-F hex screw	xxxxx
Base plate		
1x	XXX base plate	xxxxx
Screws and nuts for sub-structure MIQ girder		
2x	MIQM-M12 wing nut	2120275
2x	M12x30-F hex screw	xxxxx

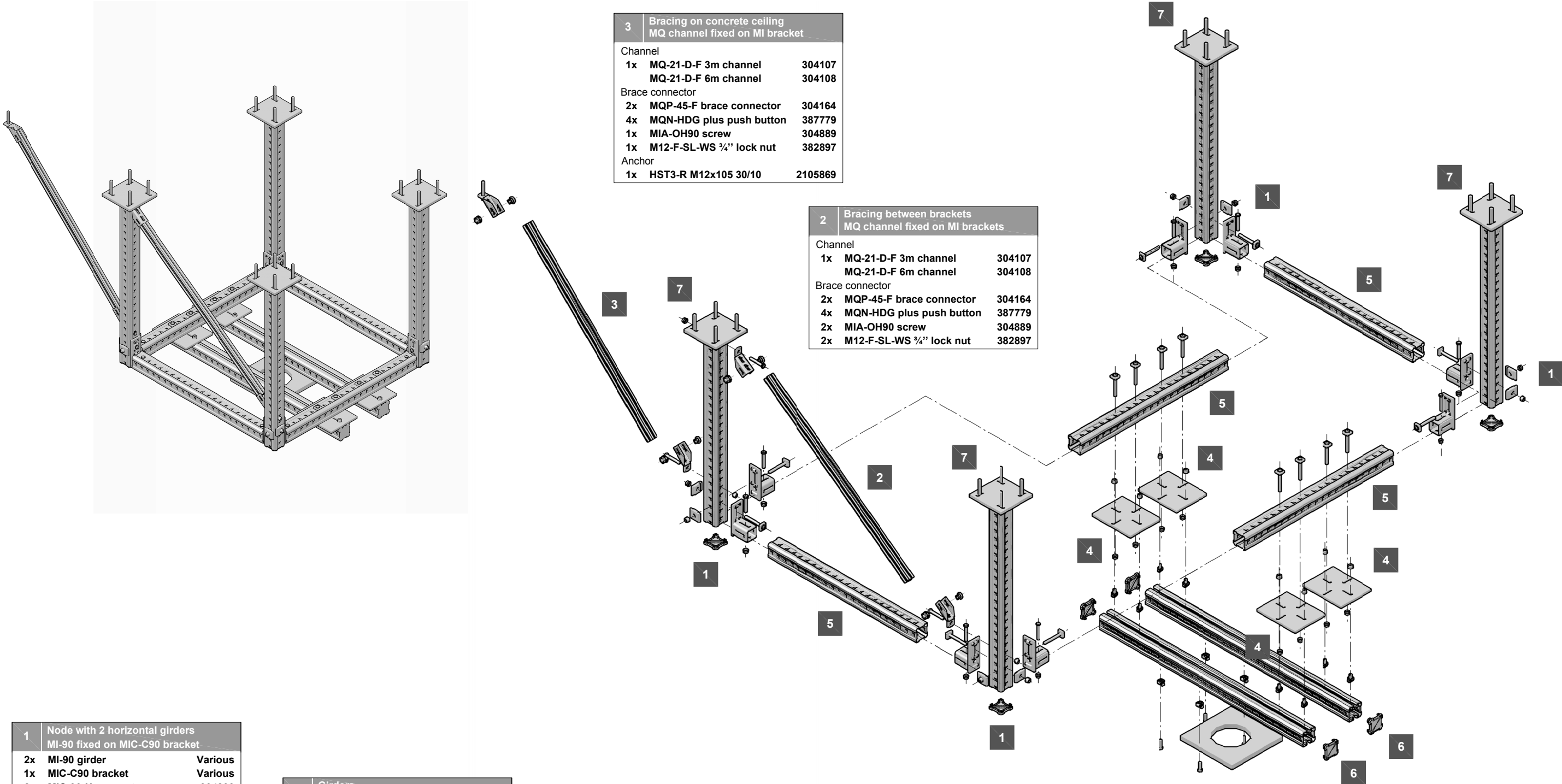
6	Girders MIQ-90 for supporting device	
Girder		
1x	MIQ-90 3m girders	2119866
	MIQ-90 6m girders	2119767
Plastic caps		
2x	MIA-EC-90 plastic endcap	432077
Connection between MIQ girder and supporting device		
2x	MIQM-M12 wing nut	2120275
2x	M12x-25-F hex. screw	304789

7	Connector MIQC-C90 Concrete connector for MIQ-90	
1x	MIQC-C90 connector	2120144
	Contains connector and all through bolts	
Anchors		
4x	HST3-R M16x135 35/15	2105876

Application description	Application	Product lines	Base material
MIQ System - Overhead Grid On Concrete	 <b>15</b>	MIQ System	Concrete
General comments		Anchors	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations		Accessories	

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MI/MIQ System - Overhead Grid On Concrete - Options



1	Node with 2 horizontal girders MI-90 fixed on MIC-C90 bracket	
2x	MI-90 girder	Various
1x	MIC-C90 bracket	Various
2x	MIC-90-U connector	304803
Contains connectors, all through bolts, back plate and lock nut		
1x	MIA-EC-90 plastic endcap	432077

5	Girders MI-90	
	MI-90 3m girders	304798
	MI-90 6m girders	304799

4	Connection between primary 3D cube and sub-structure girder MI-120		
Screws and nuts for connection primary 3D cube			
2x	MIA-EH90 easy hand screw	304887	
2x	M12-F-SL-WS ¾" lock nut	382897	
Base plate			
1x	XXX base plate	xxxxx	
Screws and nuts for sub-structure MIQ girder			
2x	MIQA-T T-bolt	2120142	
2x	M12-F-SL-WS ¾" lock nut	382897	

6	Girders MIQ-90 for supporting device	
Girder		
1x	MIQ-90 3m girders	2119866
	MIQ-90 6m girders	2119767
Plastic caps		
2x	MIA-EC-90 plastic endcap	432077
Connection between MIQ girder and supporting device		
2x	MIQM-M12 wing nut	2120275
2x	M12x-25-F hex. screw	304789

Brackets MIC-C90/120-D for concrete Bracket instead of vertical upright and base conn.		
1x	MIC-C90-D-500	267789
	MIC-C90-D-750	267790
	MIC-C90-D-1000	267791
	MIC-C90-D-1500	267792
	MIC-C90-D-2000	267793
	MIC-C120-D-500	270468
	MIC-C120-D-750	270469
	MIC-C120-D-1000	270470
	MIC-C120-D-1500	270471
	MIC-C120-D-2000	270472
Anchors		
4x	HST3-R M16x135 35/15	2105876

Application description

MI/MIQ System - Overhead Grid On Concrete

General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application

Product lines

Base material



15

MI/MIQ System

Concrete

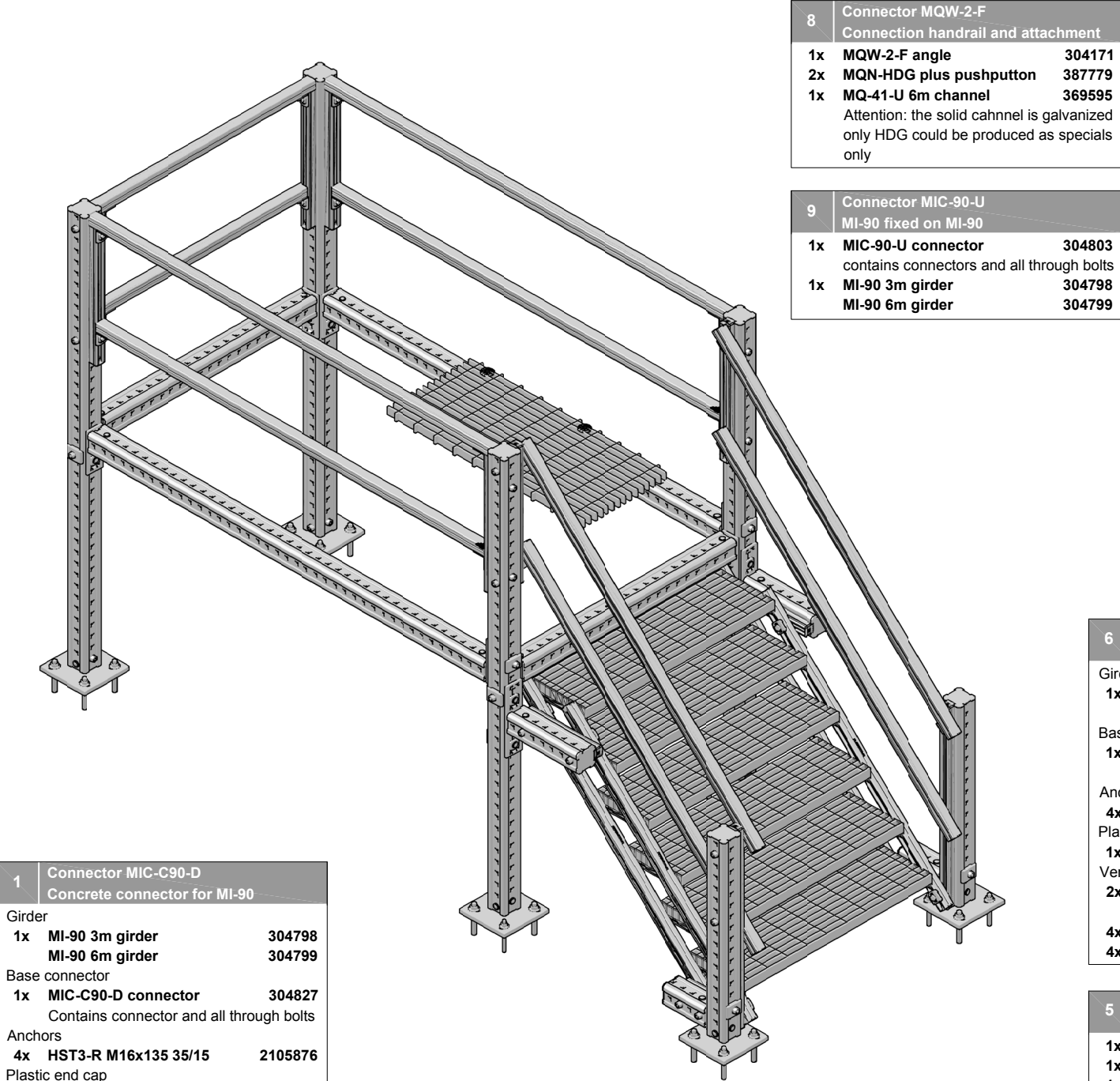
Anchors

Accessories

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MI System - Platform On Concrete - Options



1	Connector MIC-C90-D Concrete connector for MI-90
Girder	
1x MI-90 3m girder	304798
MI-90 6m girder	304799
Base connector	
1x MIC-C90-D connector	304827
Contains connector and all through bolts	
Anchors	
4x HST3-R M16x135 35/15	2105876
Plastic end cap	
1x MIA-EC-90 plastic endcap	432077
MQ attachment beam for handrail	
1x MQ-41-F 3m channel	304099
MQ-41-F 6m channel	304100
2x MIA-OH90 screw	304890
2x MQZ-E41 plastic endcap	369685

2	Bottom bracket MI-90 for sloping MQ channels
Girder	
1x MI-90 3m girder	304798
MI-90 6m girder	304799
Base connector	
1x MIC-90-U connector	304803
Contains connector and all through bolts	
Plastic end cap	
1x MIA-EC-90 plastic endcap	432077
MQ attachment beam for handrail	
1x MQ-41-F 3m channel	304099
MQ-41-F 6m channel	304100
2x MIA-OH90 screw	304890
2x MQZ-E41 plastic endcap	369685

3	Connecting handrail to vertical MQ attachment on MI columns
2x MQM-M12-F wing nut	304140
2x M12x25-F hex.head screw	304789
1x MF-FL 10 angle	406377
2x A13/24-F washer	304771
1x MQ-41-U 6m channel	369595
Attention: the solid channel is galvanized only HDG could be produced as specials only	

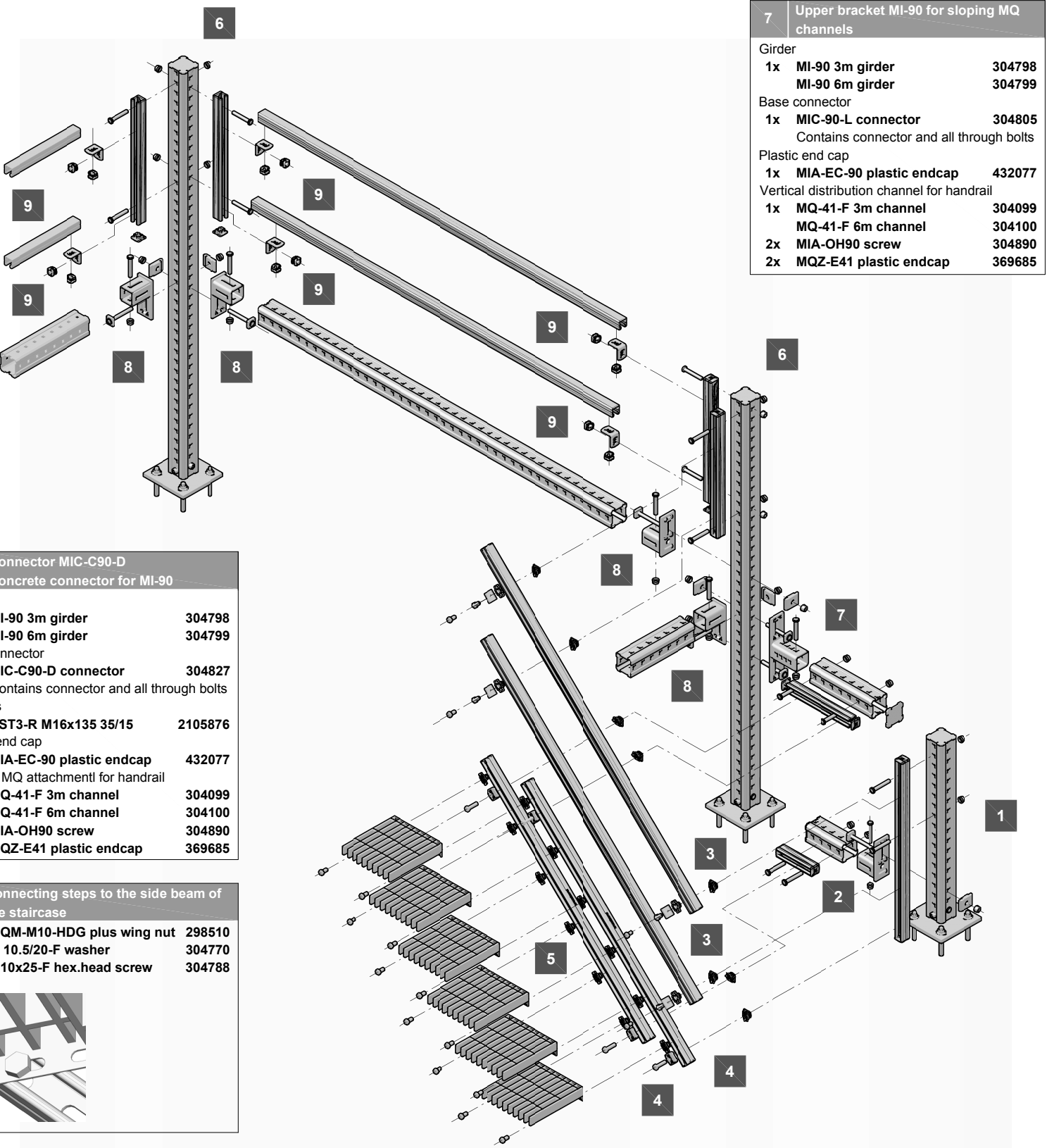
4	Connecting side beam of the staircase to MI columns
2x M12x50-F hex. screw connection screw	Specials
1x MQ-41-F 3m channel	304099
MQ-41-F 6m channel	304100
2x MQM-M12-F wing nut	304140
2x MQZ-E41 plastic end cap	369685

8	Connector MQW-2-F Connection handrail and attachment
1x MQW-2-F angle	304171
2x MQN-HDG plus pushputton	387779
1x MQ-41-U 6m channel	369595
Attention: the solid cahnnel is galvanized only HDG could be produced as specials only	

9	Connector MIC-90-U MI-90 fixed on MI-90
1x MIC-90-U connector	304803
contains connectors and all through bolts	
1x MI-90 3m girder	304798
MI-90 6m girder	304799

6	Connector MIC-C90-D Concrete connector for MI-90
Girder	
1x MI-90 3m girder	304798
MI-90 6m girder	304799
Base connector	
1x MIC-C90-D connector	304827
Contains connector and all through bolts	
Anchors	
4x HST3-R M16x135 35/15	2105876
Plastic end cap	
1x MIA-EC-90 plastic endcap	432077
Vertical MQ attachment! for handrail	
2x MQ-41-F 3m channel	304099
MQ-41-F 6m channel	304100
4x MIA-OH90 screw	304890
4x MQZ-E41 plastic endcap	369685

5	Connecting steps to the side beam of the staircase
1x MQM-M10-HDG plus wing nut	298510
1x A 10.5/20-F washer	304770
1x M10x25-F hex.head screw	304788



7	Upper bracket MI-90 for sloping MQ channels
Girder	
1x MI-90 3m girder	304798
MI-90 6m girder	304799
Base connector	
1x MIC-90-L connector	304805
Contains connector and all through bolts	
Plastic end cap	
1x MIA-EC-90 plastic endcap	432077
Vertical distribution channel for handrail	
1x MQ-41-F 3m channel	304099
MQ-41-F 6m channel	304100
2x MIA-OH90 screw	304890
2x MQZ-E41 plastic endcap	369685


Application description

MI System - Platform On Concrete

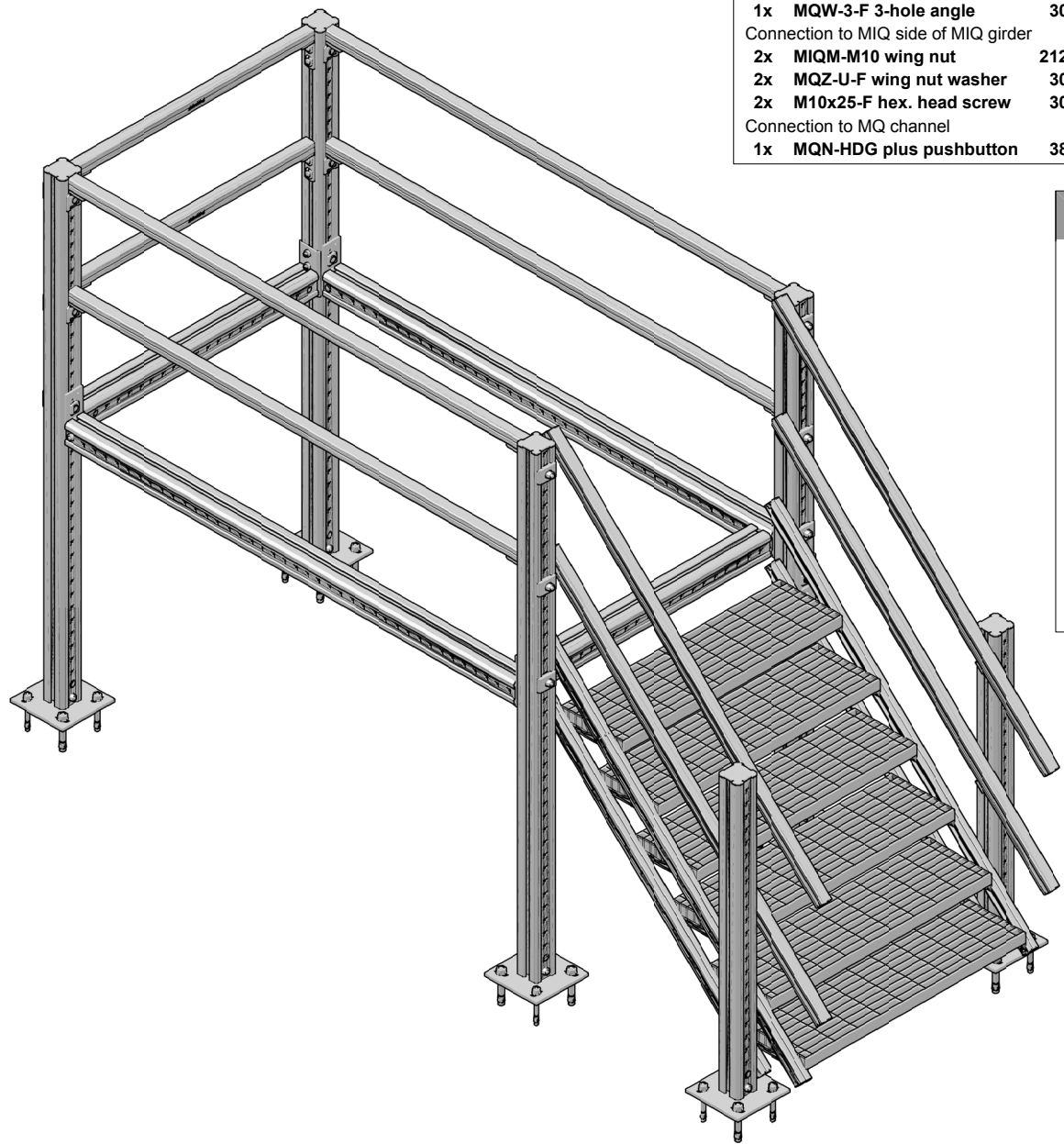
General comments

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Application	Product lines	Base material
 <b>16</b>	MI System	Concrete
	MQ System	
	Accessories	

# MIQ System - Platform On Concrete - Options



9	Connecting Handrail to MIQ side of MIQ column	
Connector		
1x	MQW-3-F 3-hole angle	304172
Connection to MIQ side of MIQ girder		
2x	MIQM-M10 wing nut	2120275
2x	MQZ-U-F wing nut washer	304208
2x	M10x25-F hex. head screw	304788
Connection to MQ channel		
1x	MQN-HDG plus pushbutton	387779

8	Connector MIQC-90-HT MIQ-90 fixed on MIQ-90	
1x	MIQC-90-HT connector	2123881
contains connectors and all through bolts		

7	Connecting Handrail to MI side of MIQ column	
Connector		
1x	MC-MI-AH-90 OC-a angle	2063283
Connection to MI side of MIQ girder		
1x	MIA-EH90 through bolt	304887
1x	MIA-EH-P backing plate	304891
1x	M12-F-SL-WS 3/4" lock nut	382897
Connection to MQ channel		
1x	MQM-M10-HDG plus wing nut	298510
1x	M10x25-F hex.head screw	304788

6	Connector MIQC-90-MI MIQ-90 fixed on MIQ-90	
1x	MIQC-90-MI connector	2140257
contains connectors and all through bolts		

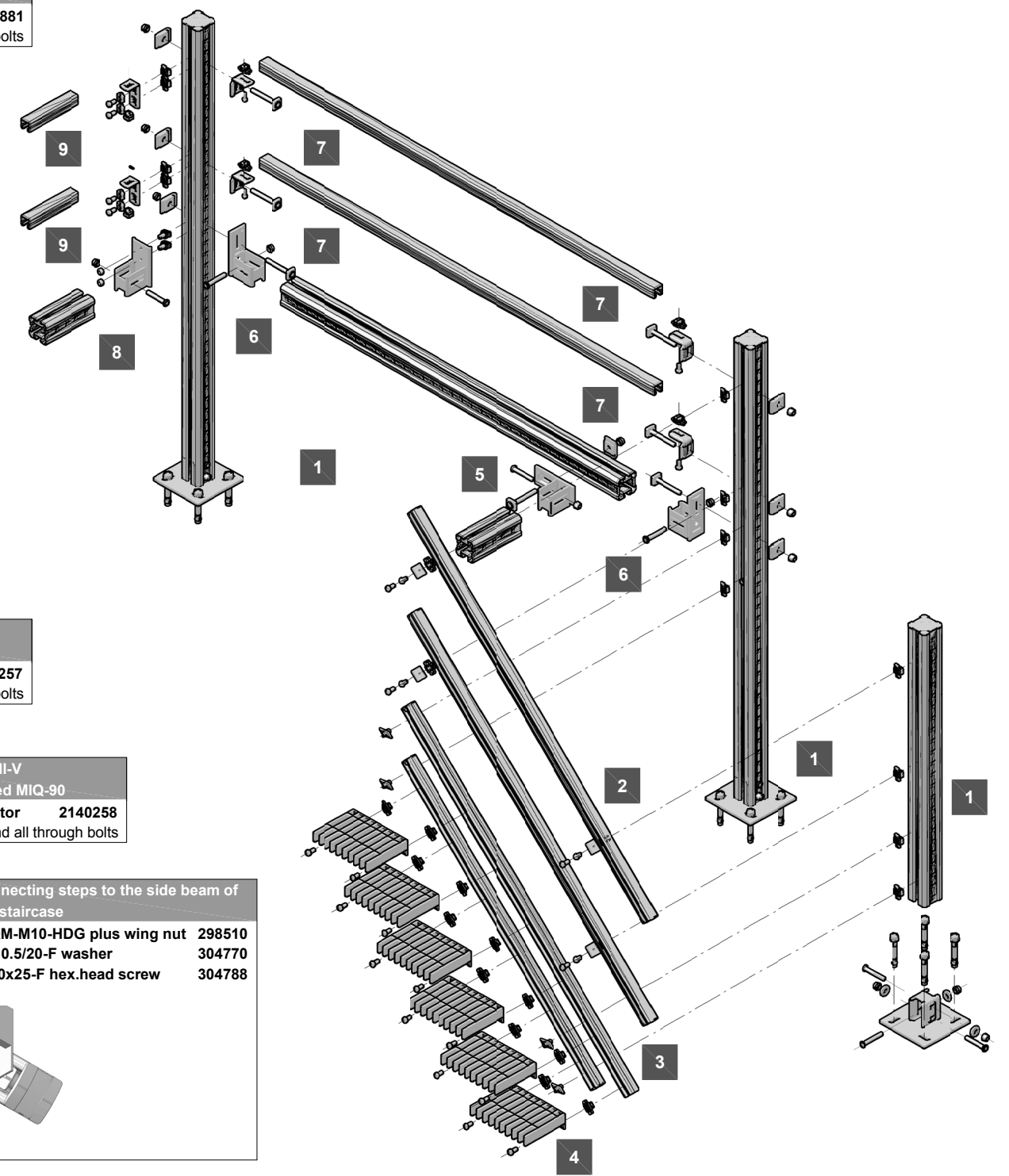
5	Connector MIQC-90-MI-V MIQ-90 fixed on rotated MIQ-90	
1x	MIQC-90-MI-V connector	2140258
contains connectors and all through bolts		


4	Connecting steps to the side beam of the staircase	
1x	MQM-M10-HDG plus wing nut	298510
1x	A 10.5/20-F washer	304770
1x	M10x25-F hex.head screw	304788

3	Connecting side beam of the staircase to open s. of MIQ column	
1x	MQZ-S-F screw connection screw	2063162
1x	MQ-41-F 3m channel	304099
1x	MIQM-M12 wing nut	2120275
1x	MQZ-E41 plastic end cap	369685

2	Connecting handrail to open section of MIQ columns	
1x	MIQM-M12 wing nut	2120275
2x	M12x25 hex.head screw	304789
1x	MF-FL 10 angle	406377
2x	A13/24-F washer	304771
1x	MQ-41-U 6m channel	369595
Attention: the solid cahnnel is galvanized only HDG could be produced as specials only		
1x	MQM-M12 wing nut	369627

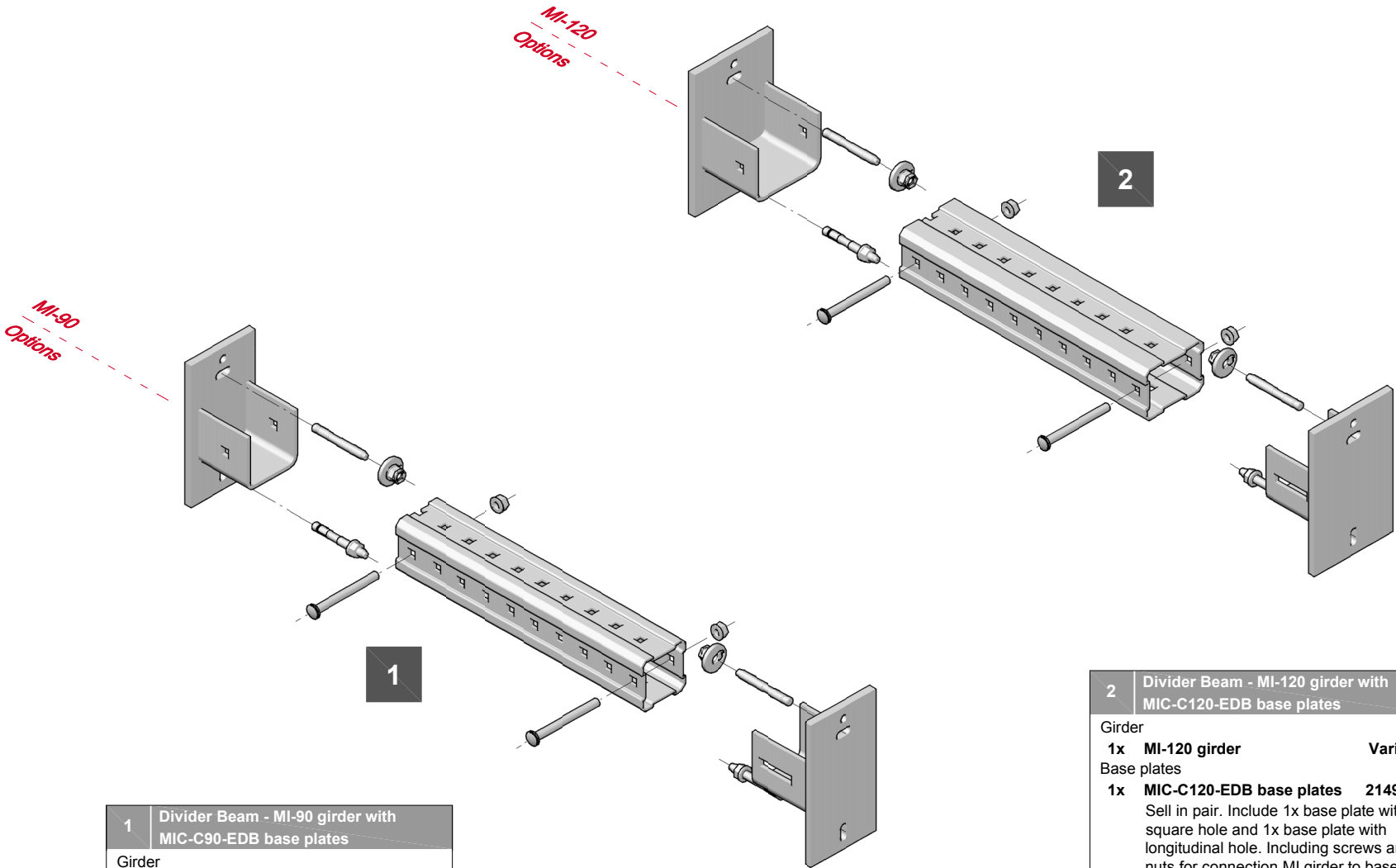
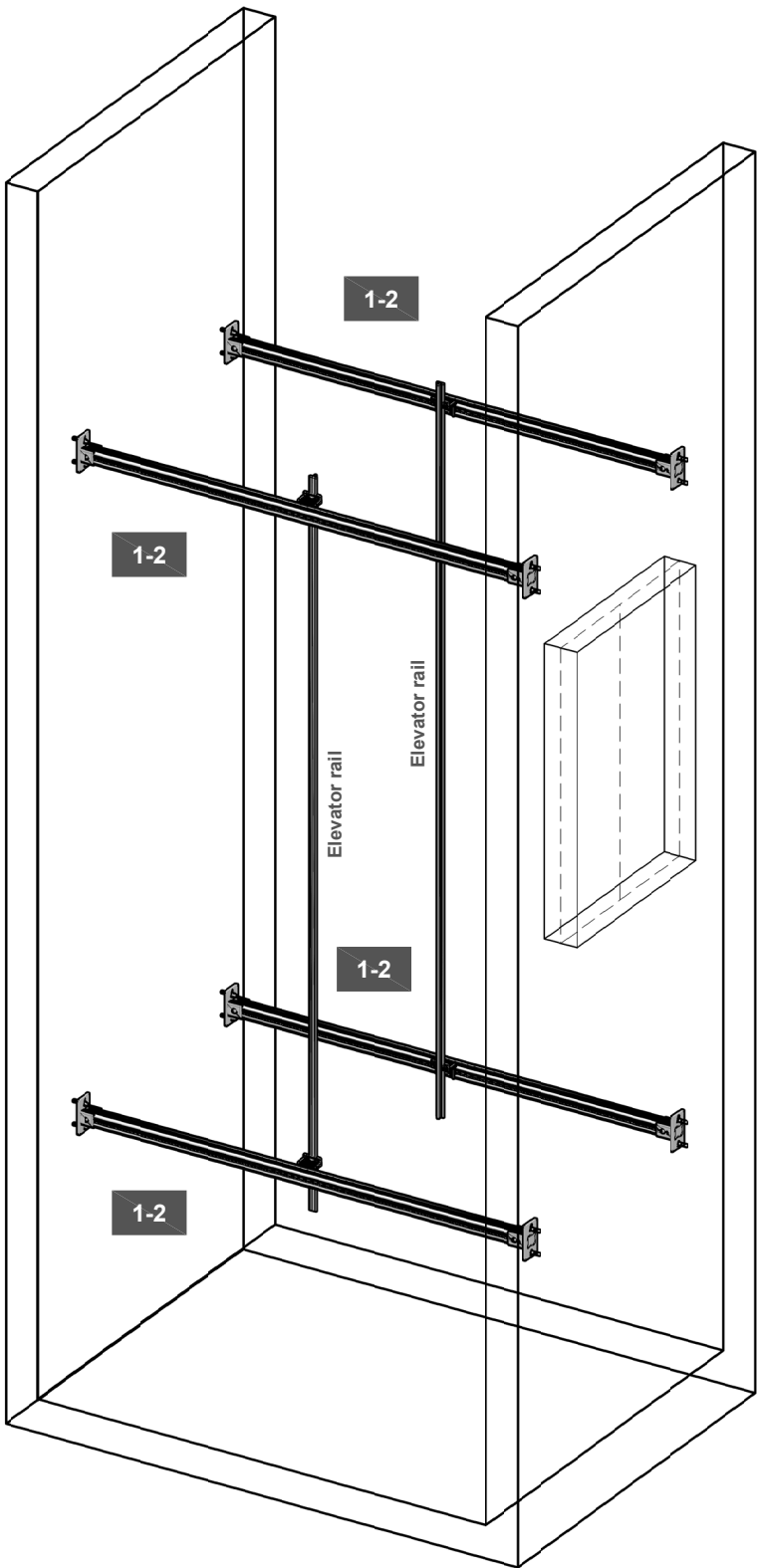
1	Connector MIQC-C90 Concrete connector for MIQ-90	
Girder		
1x	MIQ-90 3m girder	2119866
	MIQ-90 6m girder	2119867
Base connector		
1x	MIQC-C90 connector	2120144
Contains connector and all through bolts		
Anchors		
4x	HST3-R M16x135 35/15	2105876
Plastic end cap		
1x	MIA-EC-90 plastic endcap	432077



Application description		Application	Product lines	Base material
MIQ System - Platform On Concrete			MIQ System	Concrete
General comments			MQ System	
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MI System - Elevator - Divider Beam - Options




1	Divider Beam - MI-90 girder with MIC-C90-EDB base plates	
Girder		
1x	MI-90 girder	Various
Base plates		
1x	MIC-C90-EDB base plates	2149279
Sell in pair. Include 1x base plate with square hole and 1x base plate with longitudinal hole. Including screws and nuts for connection MIQ girder to base plates.		
Connection to concrete walls		
4x	HST3 M12x115 40/20	2105719
Galvanized anchors - supposed indoor application		
2x	Seismic set M12	2127789
Seismic set have to be used with upper anchors. Seismic set is filled hybrid adhesive mortar HIT-HY 200 (HIT-HY 200-A 330ml 2022791)		

Girders		
MI-90		
MI-90 3m girder		304798
MI-90 6m girder		304799

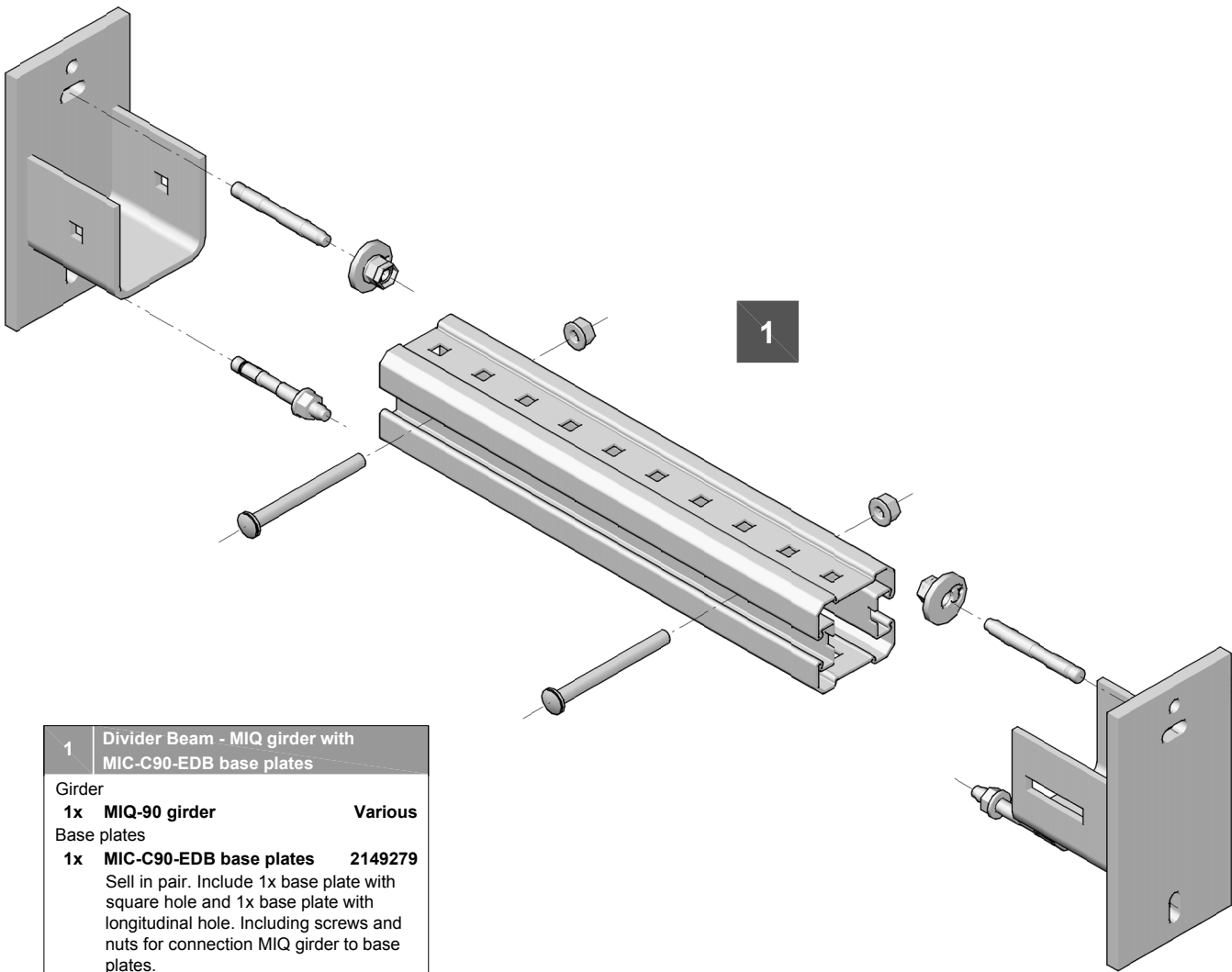
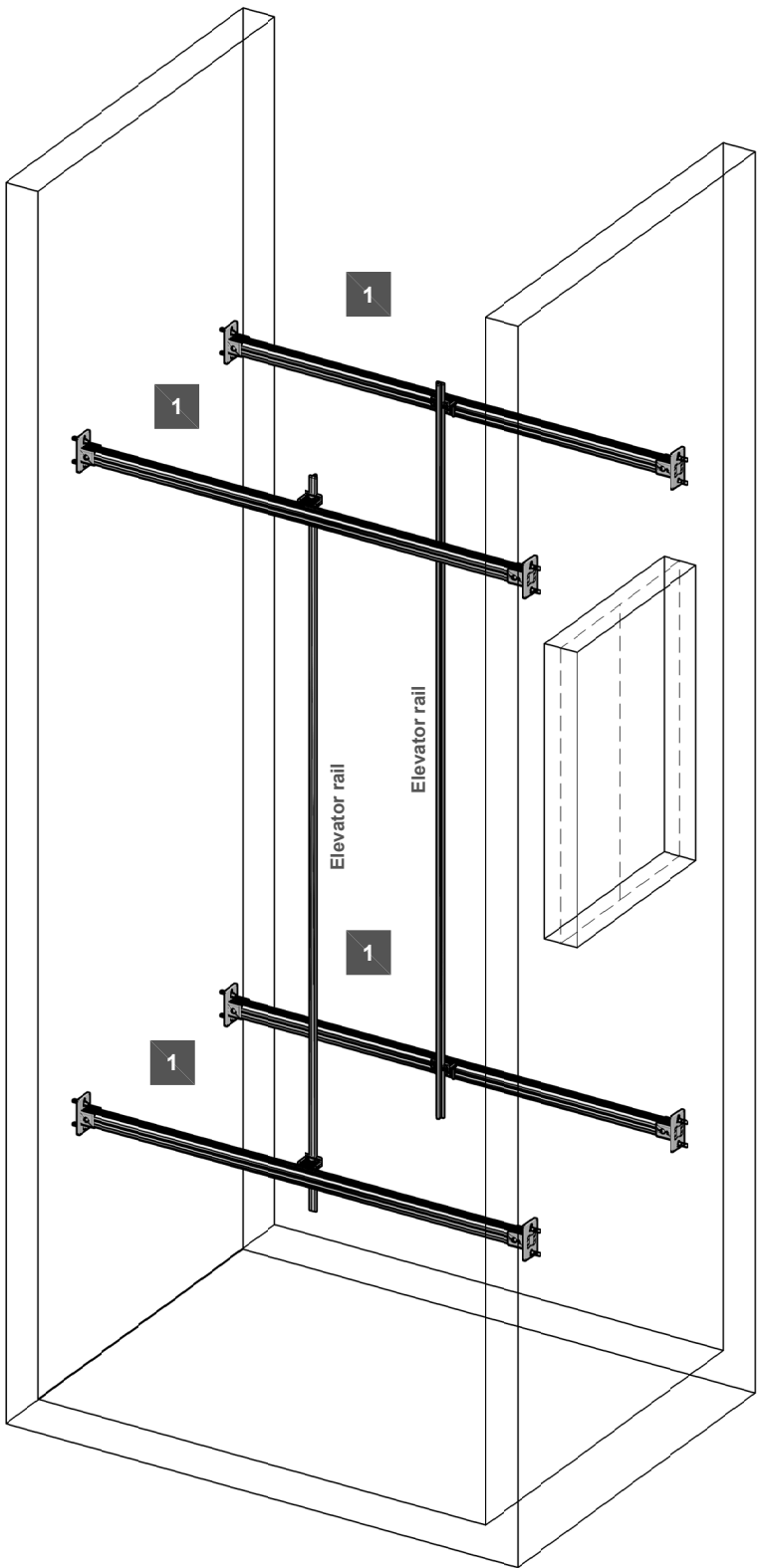
Girders		
MI-120		
MI-120 3m girder		304800
MI-120 6m girder		304801

2	Divider Beam - MI-120 girder with MIC-C120-EDB base plates	
Girder		
1x	MI-120 girder	Various
Base plates		
1x	MIC-C120-EDB base plates	2149420
Sell in pair. Include 1x base plate with square hole and 1x base plate with longitudinal hole. Including screws and nuts for connection MI girder to base plates.		
Connection to concrete walls		
4x	HST3 M12x115 40/20	2105719
Galvanized anchors - supposed indoor application		
2x	Seismic set M12	2127789
Seismic set have to be used with upper anchors. Seismic set is filled hybrid adhesive mortar HIT-HY 200 (HIT-HY 200-A 330ml		
		2022791)

Application description	Application	Product lines	Base material
MI System - Elevator - Divider Beam	 17	MI System	Concrete
General comments		Anchors	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations		Accessories	

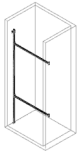
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MIQ System - Elevator - Divider Beam - Options



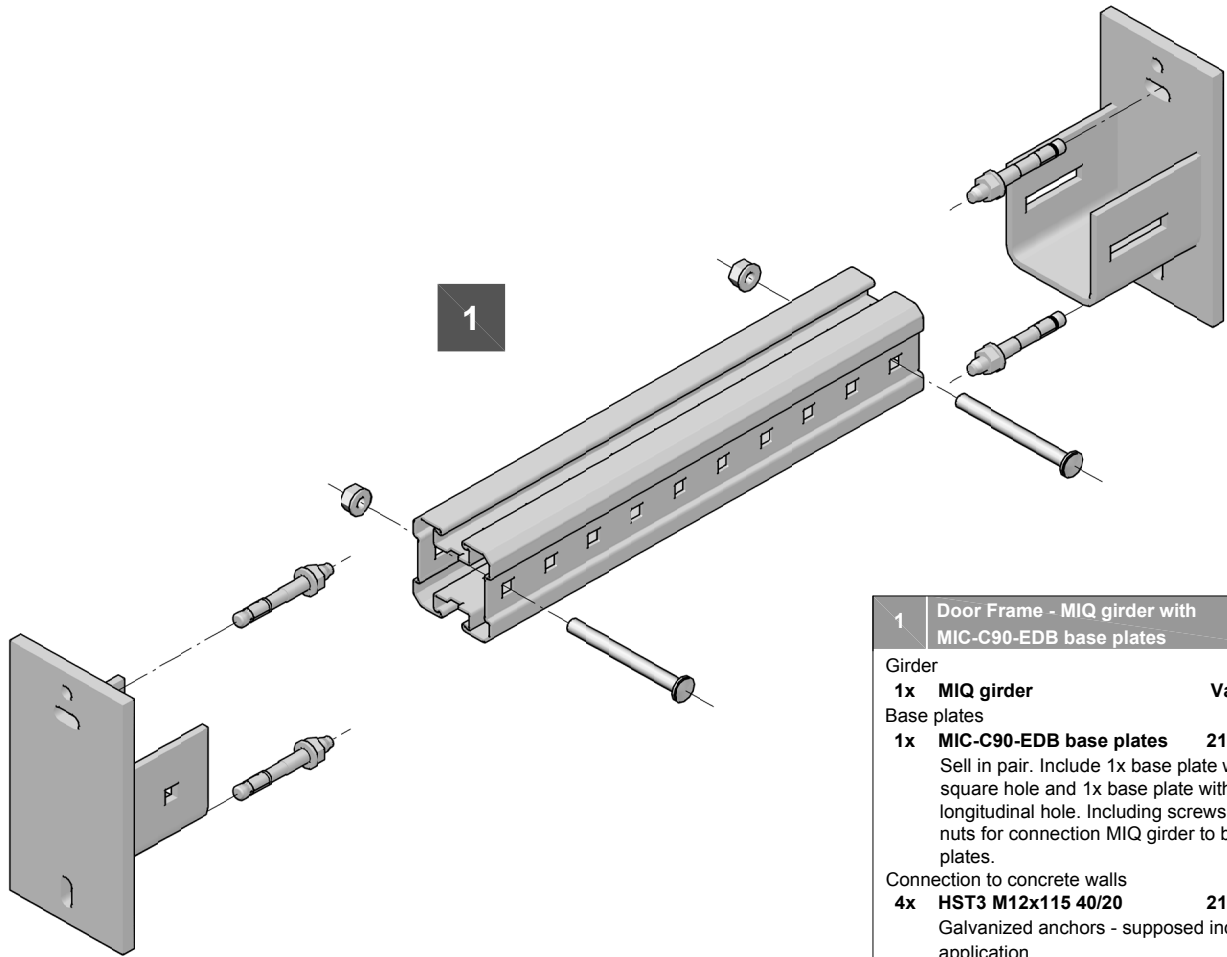
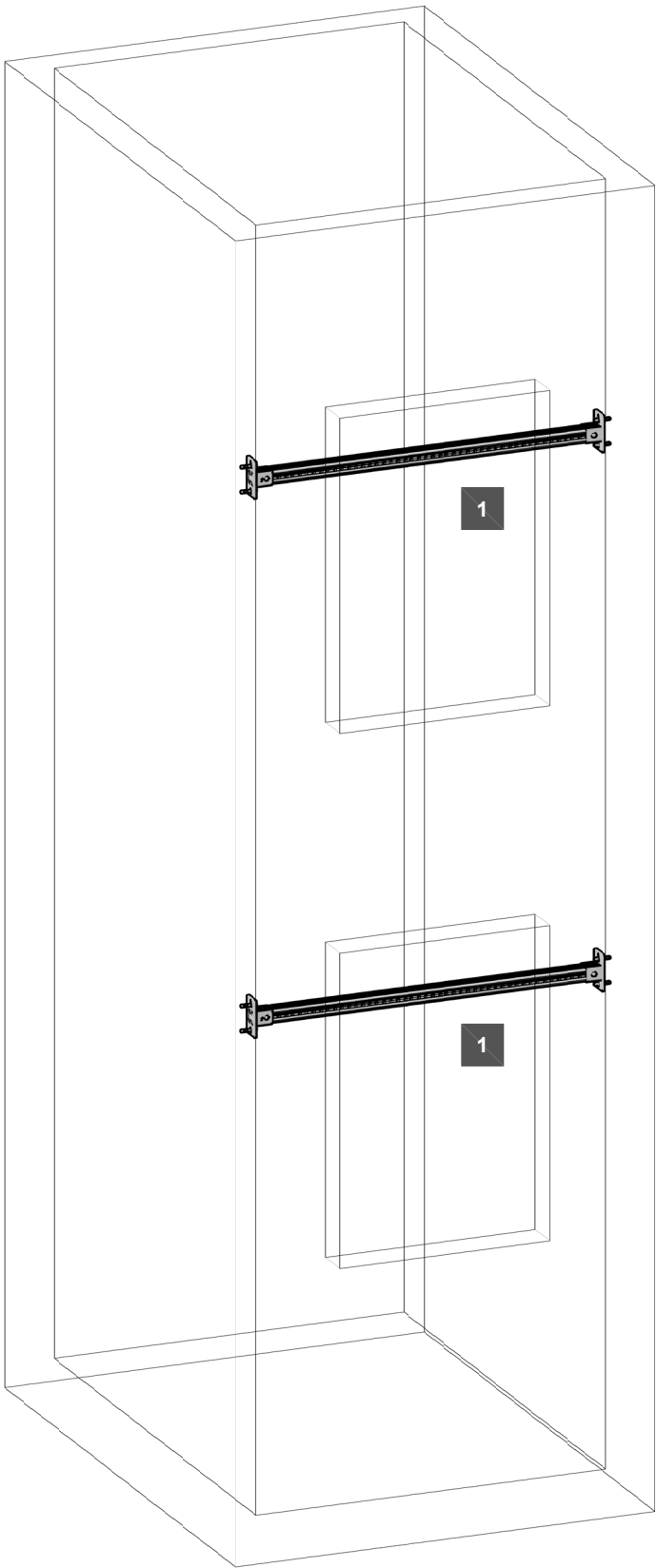
1	Divider Beam - MIQ girder with MIC-C90-EDB base plates	
Girder		
1x	MIQ-90 girder	Various
Base plates		
1x	MIC-C90-EDB base plates	2149279
Sell in pair. Include 1x base plate with square hole and 1x base plate with longitudinal hole. Including screws and nuts for connection MIQ girder to base plates.		
Connection to concrete walls		
4x	HST3 M12x115 40/20	2105719
Galvanized anchors - supposed indoor application		
2x	Seismic set M12	2127789
Seismic set have to be used with upper anchors. Seismic set is filled hybrid adhesive mortar HIT-HY 200 (HIT-HY 200-A 330ml 2022791)		

Girders	
MIQ-90	
MIQ-90 3m girder	2119866
MIQ-90 6m girder	2119867

Application description	Application	Product lines	Base material
MIQ System - Elevator - Divider Beam	 <b>17</b>	MIQ System	Concrete
General comments		Anchors	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations		Accessories	


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MIQ System - Elevator - Door Frame - Options



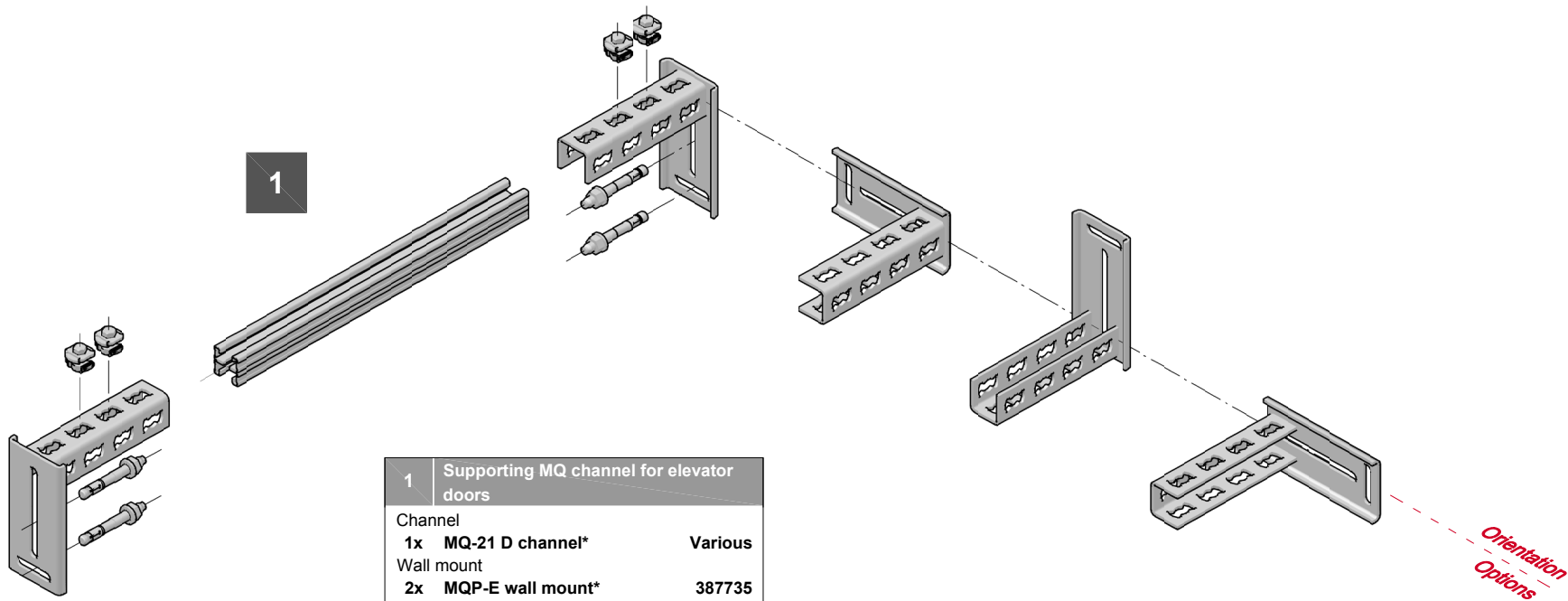
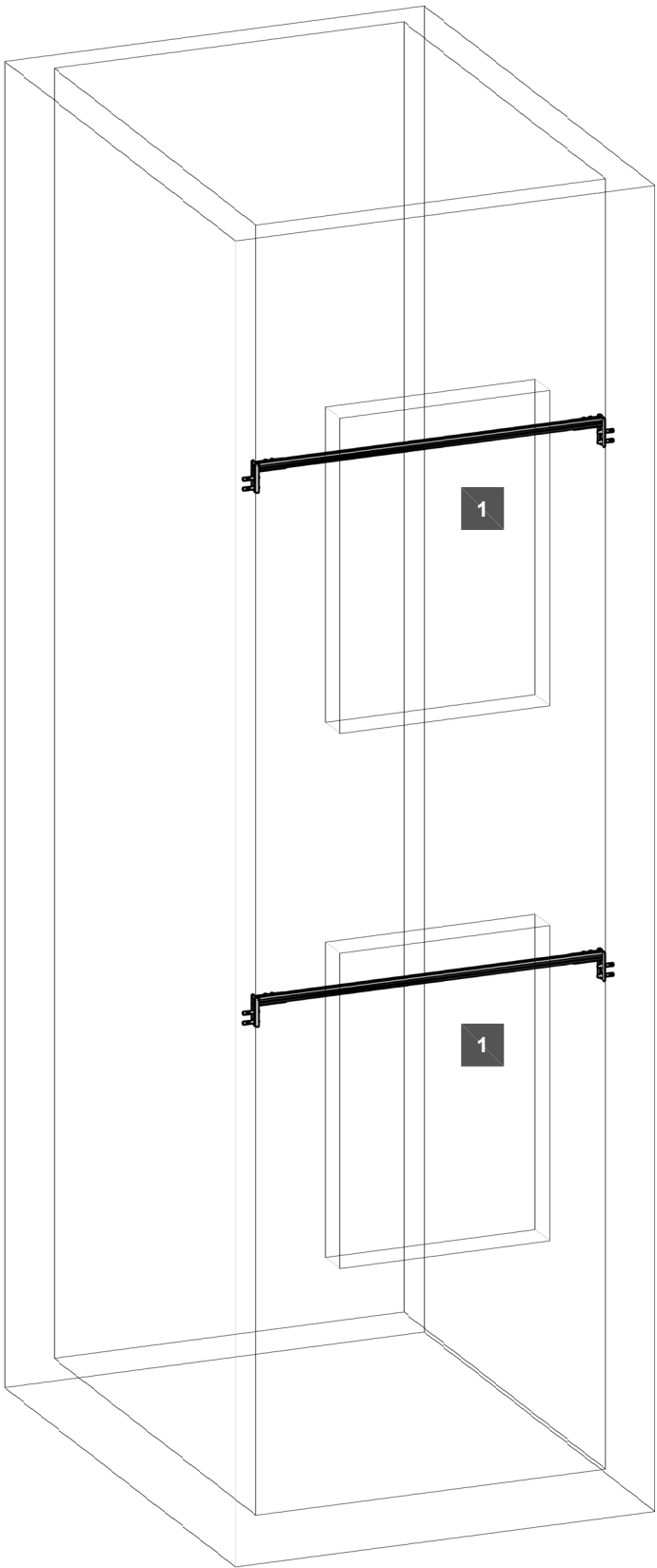
1	Door Frame - MIQ girder with MIC-C90-EDB base plates	
Girder		
1x	MIQ girder	Various
Base plates		
1x	MIC-C90-EDB base plates	2149279
Sell in pair. Include 1x base plate with square hole and 1x base plate with longitudinal hole. Including screws and nuts for connection MIQ girder to base plates.		
Connection to concrete walls		
4x	HST3 M12x115 40/20	2105718
Galvanized anchors - supposed indoor application		

Girders	
MIQ	
MIQ-90 3m girder	2119866
MIQ-90 6m girder	2119867

Application description	Application	Product lines	Base material
MIQ System - Elevator - Door Frame	 <b>17</b>	MIQ System	Concrete
General comments		Anchors	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations		Accessories	

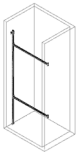
Hilti strongly advises customers to verify the respective product application for the intended use by consulting a structural engineer and making the necessary calculations to ensure compliance with the applicable norms and standards. Failure to consult and heed the advice of a structural engineer will free Hilti from any liability. It is essential that the product is used strictly in accordance with the applicable Hilti instructions for use, within the application limits specified in the Hilti technical data sheets, technical specifications and supporting product literature, and that the relevant application limits are not exceeded at any time. All rights reserved by Hilti Corporation. Duplication, utilization and/or publication of drawings contained in this manual are not permitted unless expressly agreed by Hilti Corporation.

MQ System - Elevator - Door Frame - Options



1	Supporting MQ channel for elevator doors	
Channel		
1x	MQ-21 D channel*	Various
Wall mount		
2x	MQP-E wall mount*	387735
8x	MQN push button*	369623
Anchors		
4x	HST3 M12x105 30/10*	2105718

Channels	
MQ-21D	
MQ-21 D 3m channel	369601
MQ-21-D 6m channel	369603

Application description	Application	Product lines	Base material
MQ System - Elevator - Door Frame	 <b>17</b>	MQ System	Concrete
General comments		Anchors	
<ul style="list-style-type: none"><li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>		Accessories	

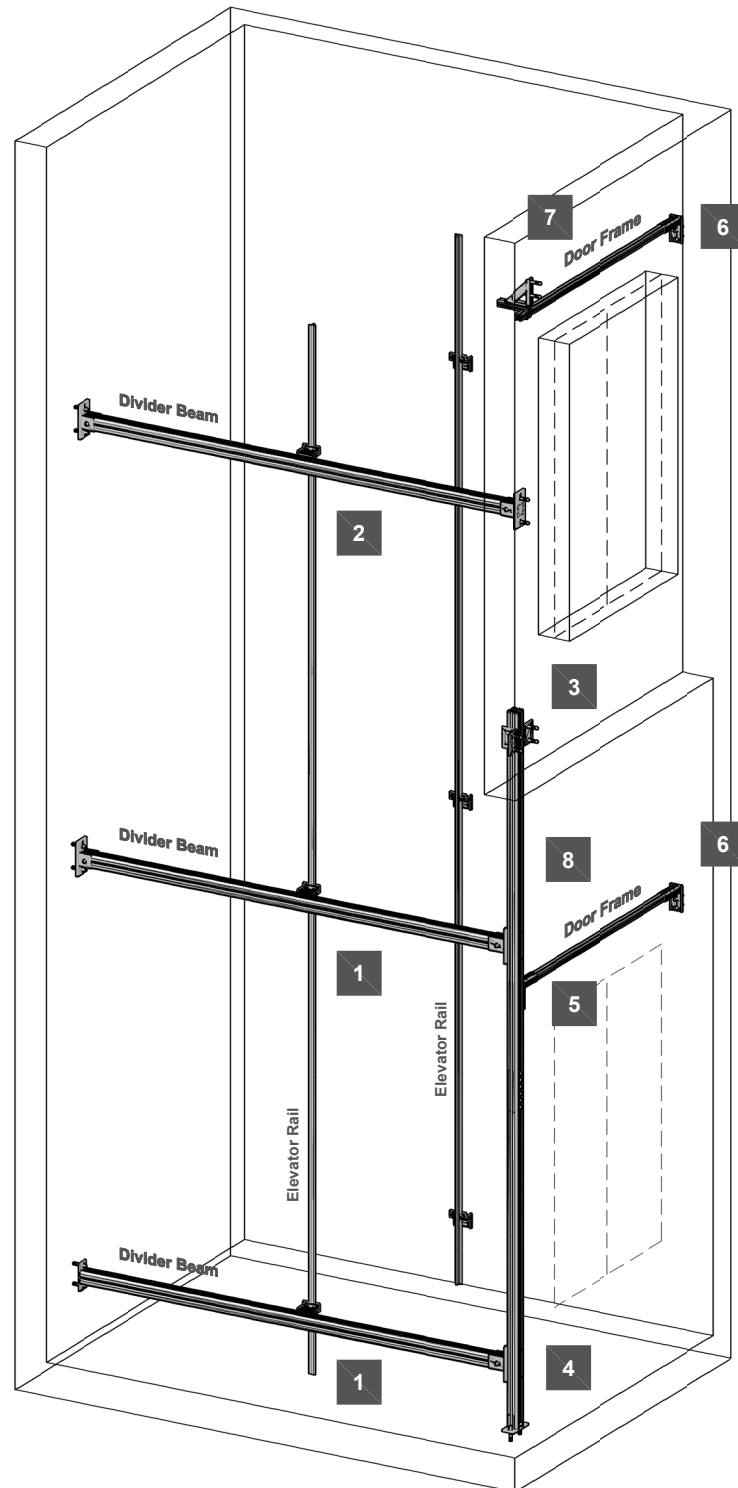
Hilti strongly advises customers to verify the respective product application for the intended use by consulting a structural engineer and making the necessary calculations to ensure compliance with the applicable norms and standards. Failure to consult and heed the advice of a structural engineer will free Hilti from any liability. It is essential that the product is used strictly in accordance with the applicable Hilti instructions for use, within the application limits specified in the Hilti technical data sheets, technical specifications and supporting product literature, and that the relevant application limits are not exceeded at any time. All rights reserved by Hilti Corporation. Duplication, utilization and/or publication of drawings contained in this manual are not permitted unless expressly agreed by Hilti Corporation.

\* Item is galvanized - supposed indoor application.

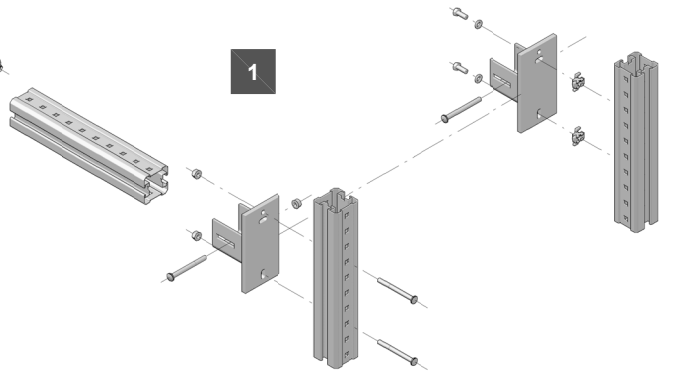
# MIQ System - Elevator Shaft - Options

Girders		
MIQ-90		
MIQ-90 3m girder	2119866	
MIQ-90 6m girder	2119867	

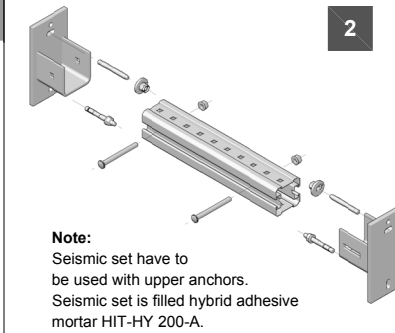
Channels		
MQ-21D		
MQ-21 D 3m channel	369601	
MQ-21-D 6m channel	369603	



**Note:**  
Seismic set have to be used with upper anchors. Seismic set is filled hybrid adhesive mortar HIT-HY 200-A

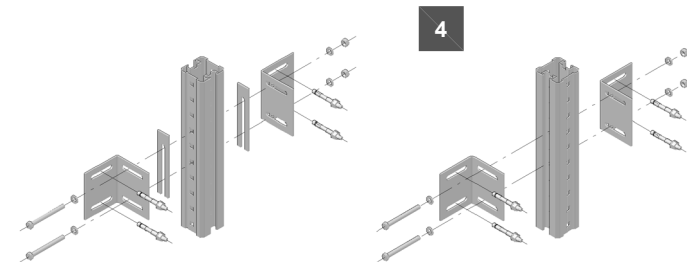


1 Horizontal girder between vertical girder and concrete wall		
Girder	1x MIQ girder	Various
Base plates	1x MIC-C90-EDB base plates	2149279
Sell in pair. Include 1x base plate with square hole and 1x base plate with longitudinal hole. Including screws and nuts for connection MIQ girder to base plates.		
Connection to concrete	4x HST3 M12x115 40/20*	2105719
	1x Seismic set M12	2127789
	+ HIT-HY 200-A 330ml	2022791
Connection to vertical MIQ girder - options to MI side	2x MIA-OH120 screw	304890
	2x M12-F-SL-WS 3/4"	382897
Connection to vertical MIQ girder - options to MIQ side	2x MIQM-M12 wing nut	2120275
	2x M12x30-F hex. screw	284387
	2x A13-F washer	304771

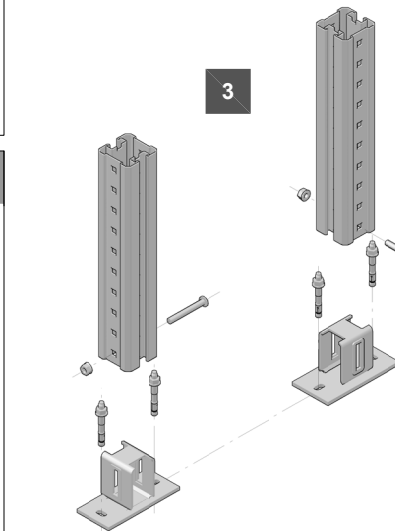


**Note:**  
Seismic set have to be used with upper anchors. Seismic set is filled hybrid adhesive mortar HIT-HY 200-A.

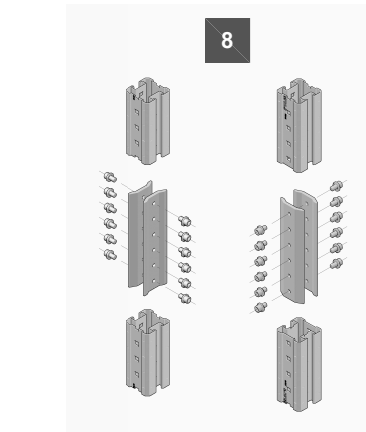
2 Horizontal girder between vertical girder and concrete wall		
Girder	1x MIQ girder	Various
Base plates	1x MIC-C90-EDB base plates	2149279
Sell in pair. Include 1x base plate with square hole and 1x base plate with longitudinal hole. Including screws and nuts for connection MIQ girder to base plates.		
Connection to concrete	4x HST3 M12x115 40/20*	2105719
	2x Seismic set M12	2127789
	+ HIT-HY 200-A 330ml	2022791



4 Connection vertical girder to concrete wall		
Girder	1x MIQ girder	Various
Anchors	4x HST3 M12x105 30/10*	2105718
Connection to MIQ girder - options to MI side facing the wall	2x MIC-U-EL angle	431681
	2x MIC-U-EF fork	431682
	2x M12x120-F 8.8 screw	283595
	4x A13-F washer	304771
	2x M12-F hex.nut	304766
Connection to MIQ girder - options to MIQ side facing the wall	2x MIC-U-EL angle	431681
	2x M12x120-F 8.8 screw	283595
	4x A13-F washer	304771
	2x M12-F hex.nut	304766

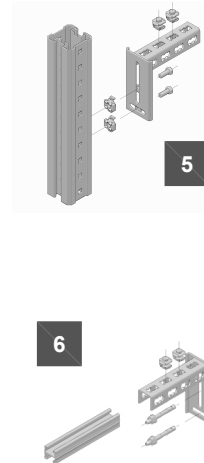


3 Connection vertical girder to concrete floor		
Girder	1x MIQ girder	Various
Base plate	1x MIQC-C90-U-V base plate	2161806
Connection to MIQ girder - options to MIQ side facing the wall		
	1x MIQC-C90-U-V base plate	2161806
Contains connector and all through bolts.		
Connection to MIQ girder - options to MI side facing the wall	1x MIQC-C90-U base plate	2134819
Contains connector and all through bolts.		
Anchors	2x HST3 M12x105 30/10*	2105718



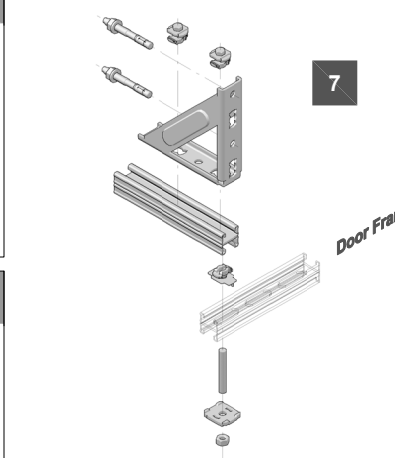
**Note:**  
There are two options of orientation extension in MIQ girder.

8 Extension for MIQ girder		
Girder	2x MIQ girder	Various
Extension	1x MIQC-90-E	2140259
Contains connector and all through bolts.		

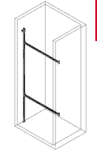


5 Supporting MQ channel for elevator doors		
Door frame channel	1x MQ-21 D channel*	Various
Wall mount	1x MQP-E wall mount*	387735
	2x MQN push button*	369623
Connection to MIQ girder to MIQ side	2x MIQM-M12 wing nut	2120275
	2x M12x25-F hex crew	304789
	2x A13-F washer	304771

6 Supporting MQ channel for elevator doors		
Door frame channel	1x MQ-21 D channel*	Various
Wall mount	1x MQP-E wall mount*	387735
	2x MQN push button*	369623
Anchors	2x HST3 M12x105 30/10*	2105718



7 Angle supporting door frame channel		
Door frame channel	1x MQ-21 D channel*	Various
Angle	1x MQW-S/2 angle*	369665
	2x MQN push button*	369623
	1x MQ-21 D channel*	Various
Short piece of channel		
	2x HST3 M12x105 30/10*	2105718
Connection between door frame channel and angle with short piece of channel		
	1x MQM-M12 wing nut*	369627
	1x AM12x1000 4.6 th. rod*	339797
Piece of th. rod with length 75 mm		
	1x MQZ-L13 bored plate*	369680
	1x M12 hex. nut*	216467
Connection to MIQ girder to MIQ side	2x MIQM-M12 wing nut	2120275
	2x M12x25-F hex crew	304789
	2x A13-F washer	304771

Application description	Application	Product lines	Base material
MIQ System - Elevator Shaft		17 MIQ/MQ System	Concrete
General comments		Anchors	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations		Accessories	

\* Item is galvanized - supposed indoor application.

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## MIQ System - Pipe Rings - Options

3	M12 options	Single support
Pipering saddle, nut and threaded rod		
1x	MQA-M12-F pipering saddle	304140
1x	M12-F hex. nut	304766
1x	AM12x1000-F 4.8	304774
Just a piece		
Pipering		
1x	MP-MXI-F 2" M10/M12	374897
	MP-MXI-F 2 1/2" M10/M12	374898
	MP-MXI-F 3" M10/M12	374899

2	M10 options	Single support
Pipering saddle, nut and threaded rod		
1x	MQA-M10-F pipering saddle	304139
1x	M10-F hex. nut	304765
1x	AM10x1000-F 4.8	304773
Just a piece		
Pipering		
1x	MP-MI-F 1/2"	304258
	MP-MI-F 3/4"	304259
	MP-MI-F 1"	304260
	MP-MI-F 1 1/4"	304261
	MP-MI-F 1 1/2"	304262
	MP-MI-F 5/4"	304263
	MP-MI-F 2"	304264
	MP-MI-F 2 1/2"	304266
	MP-MI-F 80/84	304267
	MP-MI-F 3"	304268

4	M16 options	Single support
Pipering saddle, nut and threaded rod		
1x	MQA-M16-F pipering saddle	304141
1x	M16-F hex. nut	304767
1x	AM16x1000-F 4.8	304776
Just a piece		
Pipering		
1x	MP-MXI-F 4" M16	374900
	MP-MXI-F 125 M16	374901
	MP-MXI-F 133 M16	374902
	MP-MXI-F 5" M16	374903
	MP-MXI-F 159 M16	374904
	MP-MXI-F 6" M16	374905
	MP-MXI-F 177.8 M16	374906
	MP-MXI-F 193.7 M16	374907
	MP-MXI-F 210 M16	374908
	MP-MXI-F 219 M16	374909
	MP-MXI-F 244.5 M16	374910
	MP-MXI-F 267/274 M16	374911
	MP-MXI-F 275 M16	374912
	MP-MXI-F 324 M16	374913
	MP-MXI-F 326 M16	374914
	MP-MXI-F 355 M16	374915
	MP-MXI-F 368 M16	374916
	MP-MXI-F 406 M16	374917
	MP-MXI-F 457 M16	374918
	MP-MXI-F 508 M16	374919

6	M16 options	Double support
Pipering saddle, nut and threaded rod		
2x	MQA-M16-F pipering saddle	304141
4x	M16-F hex. nut	304767
2x	AM16x1000-F 4.8	304776
Just a piece		
Pipering		
1x	MP-MXI-F 177.8 M16	374906
	MP-MXI-F 193.7 M16	374907
	MP-MXI-F 210 M16	374908
	MP-MXI-F 219 M16	374909
	MP-MXI-F 244.5 M16	374910
	MP-MXI-F 267/274 M16	374911
	MP-MXI-F 275 M16	374912
	MP-MXI-F 324 M16	374913
	MP-MXI-F 326 M16	374914
	MP-MXI-F 355 M16	374915
	MP-MXI-F 368 M16	374916
	MP-MXI-F 406 M16	374917
	MP-MXI-F 457 M16	374918
	MP-MXI-F 508 M16	374919
The original M16 screws from the pipering will remain unused		

5	M12 options	Double support
Pipering saddle, nut and threaded rod		
2x	MQA-M12-F pipering saddle	304140
2x	M12-F hex. nut	304766
2x	AM12x1000-F 4.8	304774
Just a piece		
Pipering		
1x	MP-MXI-F 4" M16	374900
	MP-MXI-F 125 M16	374901
	MP-MXI-F 133 M16	374902
	MP-MXI-F 5" M16	374903
	MP-MXI-F 159 M16	374904
	MP-MXI-F 6" M16	374905
The original M12 screws from the pipering will remain unused		

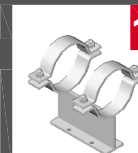
## Application description

MIQ System - Pipe Rings

## General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

## Application



18

## Product lines

MIQ System

Pipe Rings

Accessories

## Base material

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## MI System - Pipe Shoes - Options

3	Pipe shoes	
	MI-PS 1/1, height 107 and 142mm	
	MI-PS/2 200-107	304863
	MI-PS/2 250-107	304864
	MI-PS/2 300-107	304865
	MI-PS/2 350-142	304866
	MI-PS/2 400-142	304867
	MI-PS/2 500-142	304868
	MI-PS/2 600-142	304869

2	Pipe shoes	
	MI-PS 2/1, height 85 and 107mm	
	MI-PS2/1 25-85	304852
	MI-PS2/1 40-85	304853
	MI-PS2/1 50-85	304854
	MI-PS2/1 65-85	304855
	MI-PS2/1 80-85	304856
	MI-PS2/1 100-85	304857
	MI-PS2/1 125-85	304858
	MI-PS2/1 150-85	304859
3	MI-PS2/1 200-107	304860
	MI-PS2/1 250-107	304861
	MI-PS2/1 300-107	304862

1	Pipe shoes	
	MI-PS 1/1, height 85mm	
	MI-PS1/1 25-85	304844
	MI-PS1/1 40-85	304845
	MI-PS1/1 50-85	304846
	MI-PS1/1 65-85	304847
	MI-PS1/1 80-85	304848
	MI-PS1/1 100-85	304849
	MI-PS1/1 125-85	304850
	MI-PS1/1 150-85	304851

9	Guided support with low friction plate for MI-90 girder - MIC-PS90 connector	
1x	MIC-PS90 connector	304838
1x	MIC-PG low friction insert	304842

8	Guided support for MI-90 girder MIC-PS90 connector	
1x	MIC-PS90 connector	304838

7	Fixed support for MI-90 girder MIA-BO90-M12 connector	
1x	MIA-BO90-M12 connector	304840

6	Pipe shoes	
	MI-PS 2/2, height 142 and 192mm	
	MI-PS2/2 200-142	286976
	MI-PS2/2 250-142	286977
	MI-PS2/2 300-142	286978
	MI-PS2/2 350-192	286979
	MI-PS2/2 400-192	286980
	MI-PS2/2 500-192	286981
	MI-PS2/2 600-192	286982

5	Pipe shoes	
	MI-PS 2/1, height 140 and 142mm	
	MI-PS2/1 25-140	286965
	MI-PS2/1 40-140	286966
	MI-PS2/1 50-140	286967
	MI-PS2/1 65-140	286968
	MI-PS2/1 80-140	286969
	MI-PS2/1 100-140	286970
	MI-PS2/1 125-140	286971
	MI-PS2/1 150-140	286972
MI-PS2/1 200-142	286973	
MI-PS2/1 250-142	286974	
MI-PS2/1 300-142	286975	

4	Pipe shoes	
	MI-PS 1/1, height 140mm	
	MI-PS1/1 25-140	286957
	MI-PS1/1 40-140	286958
	MI-PS1/1 50-140	286959
	MI-PS1/1 65-140	286960
	MI-PS1/1 80-140	286961
	MI-PS1/1 100-140	286962
	MI-PS1/1 125-140	286963
	MI-PS1/1 150-140	286964

12	Guided support with low friction plate for MI-120 girder - MIC-PS120 connector	
1x	MIC-PS120 connector	304839
1x	MIC-PG low friction insert	304842

11	Guided support for MI-120 girder MIC-PS120 connector	
1x	<b>MIC-PS120 connector</b>	<b>304839</b>


10	Fixed support for MI-120 girder MIA-BO120-M12 connector	
1x	MIA-BO120-M12 connector	304841

## Application description

## MI System - Pipe Shoes

### General comments

- These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application	Product lines	Base material
	MI System	
	Pipe shoes	
	Accessories	

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MIQ System - Pipe Shoes - Options

3

Pipe shoes

MI-PS 1/1, height 107 and 142mm

MI-PS2/2 200-107	304863
MI-PS2/2 250-107	304864
MI-PS2/2 300-107	304865
MI-PS2/2 350-142	304866
MI-PS2/2 400-142	304867
MI-PS2/2 500-142	304868
MI-PS2/2 600-142	304869

2

Pipe shoes

MI-PS 2/1, height 85 and 107mm

MI-PS2/1 25-85	304852
MI-PS2/1 40-85	304853
MI-PS2/1 50-85	304854
MI-PS2/1 65-85	304855
MI-PS2/1 80-85	304856
MI-PS2/1 100-85	304857
MI-PS2/1 125-85	304858
MI-PS2/1 150-85	304859
MI-PS2/1 200-107	304860
MI-PS2/1 250-107	304861
MI-PS2/1 300-107	304862

1

Pipe shoes

MI-PS 1/1, height 85mm

MI-PS1/1 25-85	304844
MI-PS1/1 40-85	304845
MI-PS1/1 50-85	304846
MI-PS1/1 65-85	304847
MI-PS1/1 80-85	304848
MI-PS1/1 100-85	304849
MI-PS1/1 125-85	304850
MI-PS1/1 150-85	304851

6

Pipe shoes

MI-PS 2/2, height 142 and 192mm

MI-PS2/2 200-142	286976
MI-PS2/2 250-142	286977
MI-PS2/2 300-142	286978
MI-PS2/2 350-192	286979
MI-PS2/2 400-192	286980
MI-PS2/2 500-192	286981
MI-PS2/2 600-192	286982

5

Pipe shoes

MI-PS 2/1, height 140 and 142mm

MI-PS2/1 25-140	286965
MI-PS2/1 40-140	286966
MI-PS2/1 50-140	286967
MI-PS2/1 65-140	286968
MI-PS2/1 80-140	286969
MI-PS2/1 100-140	286970
MI-PS2/1 125-140	286971
MI-PS2/1 150-140	286972
MI-PS2/1 200-142	286973
MI-PS2/1 250-142	286974
MI-PS2/1 300-142	286975

4

Pipe shoes

MI-PS 1/1, height 140mm

MI-PS1/1 25-140	286957
MI-PS1/1 40-140	286958
MI-PS1/1 50-140	286959
MI-PS1/1 65-140	286960
MI-PS1/1 80-140	286961
MI-PS1/1 100-140	286962
MI-PS1/1 125-140	286963
MI-PS1/1 150-140	286964

8

Guided support for MI-90 girder

MIC-PS90 connector

1x MIC-PS90 connector	304838
-----------------------	--------

7

Fixed support for MI-90 girder

MIA-BO90-M12 connector

1x MIA-BO90-M12 connector	304840
---------------------------	--------

18

Application description

MIQ System - Pipe Shoes

General comments

• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations

Application

Product lines

Base material

18

Pipe shoes

Accessories

MI/MIQ System - U-bolts - Options

2	U-bolt M16	
M16		
	MI-UB 100-M16	431592
	MI-UB 125-M16	431593
	MI-UB 150-M16	431594
	MI-UB 200-M16	431595
	MI-UB 250-M16	431598

1	U-bolt M12	
M12		
	MI-UB 50-M12	431589
	MI-UB 65-M12	431590
	MI-UB 80-M12	431591
	The adaptor from the package will remain unused	

10	U-bolt with adaptor M12	
Connection		
	2x MQM-M10 HDG wing nut	298510
	2x M10x25-F hex. screw	304788
U-bolt M12		
	MI-UB 50-M12	431589
	MI-UB 65-M12	431590
	MI-UB 80-M12	431591

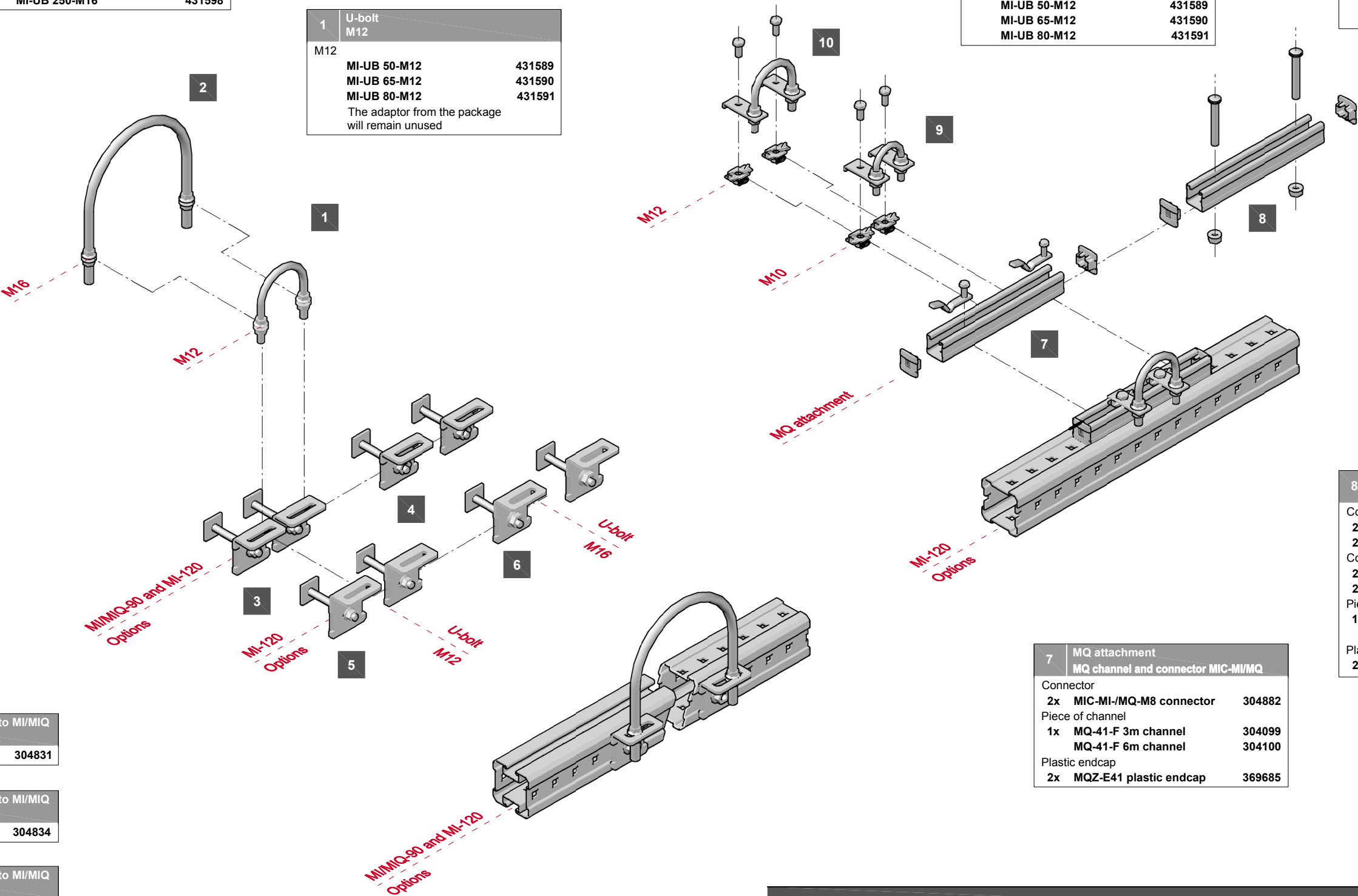
9	U-bolt with adaptor M10	
Connection		
	2x MQM-M10 HDG wing nut	298510
	2x M10x25-F hex. screw	304788
U-bolt M10		
	MI-UB 25-M10	431587
	MI-UB 40-M10	431588

3	Angle for connection U-bolt to MI/MIQ girder	
1x	MIC-UB90-M12 angle	304831

4	Angle for connection U-bolt to MI/MIQ girder	
1x	MIC-UB90-M16 angle	304834


5	Angle for connection U-bolt to MI/MIQ girder	
1x	MIC-UB120-M12 angle	304833

6	Angle for connection U-bolt to MI/MIQ girder	
1x	MIC-UB120-M16 angle	304835



8	MQ attachment MQ channel and screws MIA-OH	
Connector - MI-90 options		
	2x MIA-OH90 screw	304889
	2x M12-F-SL-WS 3/4" lock nut	382897
Connector - MI120 options		
	2x MIA-OH120 screw	304890
	2x M12-F-SL-WS 3/4" lock nut	382897
Piece of channel		
	1x MQ-41-F 3m channel	304099
	MQ-41-F 6m channel	304100
Plastic endcap		
	2x MQZ-E41 plastic endcap	369685

7	MQ attachment MQ channel and connector MIC-MI/MQ	
Connector		
	2x MIC-MI/MQ-M8 connector	304882
Piece of channel		
	1x MQ-41-F 3m channel	304099
	MQ-41-F 6m channel	304100
Plastic endcap		
	2x MQZ-E41 plastic endcap	369685

Application description		Application	Product lines	Base material
MI/MIQ System - U-bolts			MI/MIQ System	
General comments			U-bolts	
<ul style="list-style-type: none"><li>These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>			Accessories	

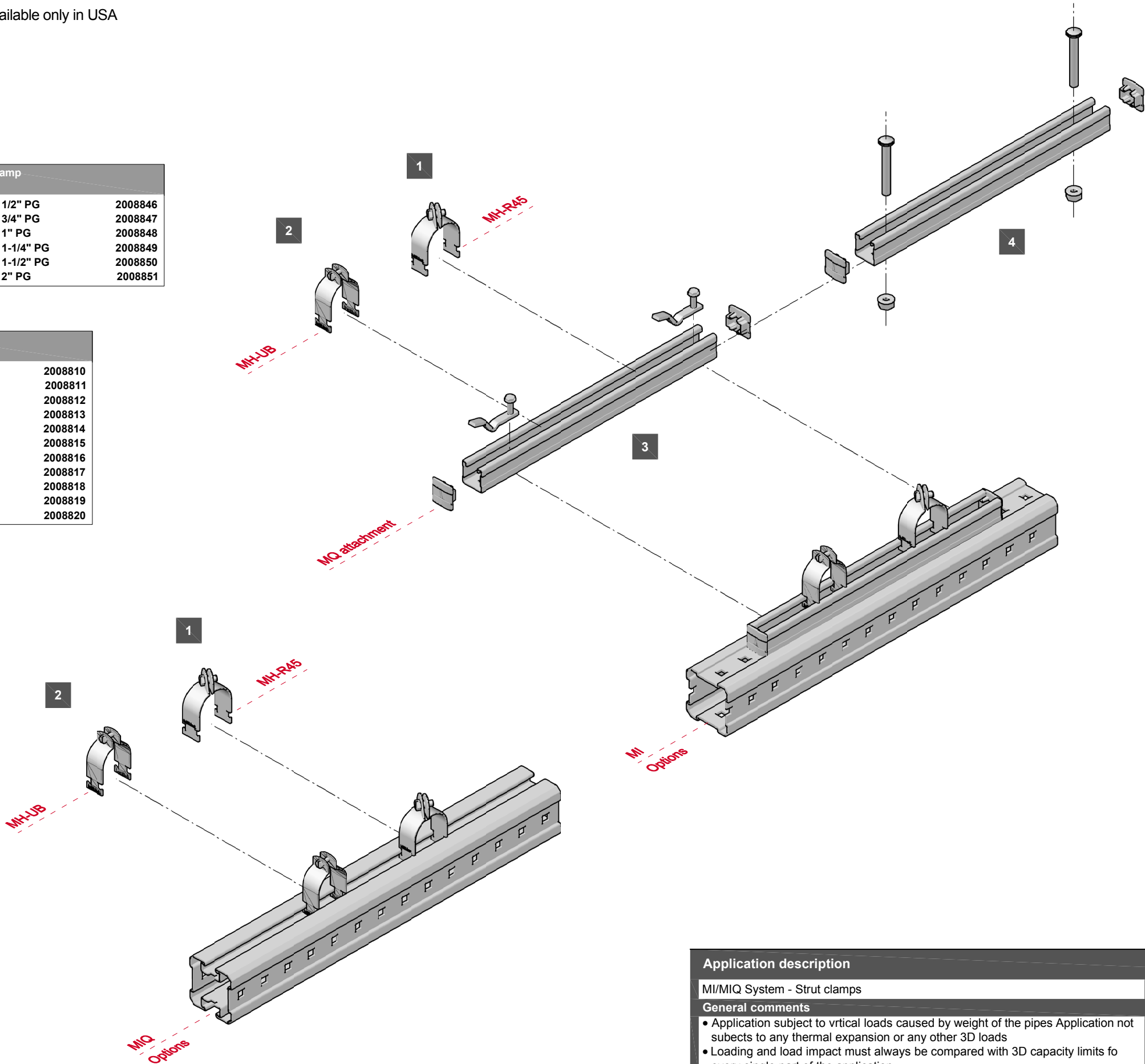
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# MI/MIQ - Strut clamps - Options

Note: These "Strut clamps" are available only in USA

2	Strut clamp MH-UB	
	MH-UB 1/2" PG	2008846
	MH-UB 3/4" PG	2008847
	MH-UB 1" PG	2008848
	MH-UB 1-1/4" PG	2008849
	MH-UB 1-1/2" PG	2008850
	MH-UB 2" PG	2008851

1	Strut clamp MH-R45	
	MH-R45 1/2" PG	2008810
	MH-R45 3/4" PG	2008811
	MH-R45 1" PG	2008812
	MH-R45 1-1/4" PG	2008813
	MH-R45 1-1/2" PG	2008814
	MH-R45 2" PG	2008815
	MH-R45 2-1/2" PG	2008816
	MH-R45 3" PG	2008817
	MH-R45 4" PG	2008818
	MH-R45 6" PG	2008819
	MH-R45 8" PG	2008820



4	MQ attachment MQ channel and screws MIA-OH	
	Connector - MI-90 options	
	2x MIA-OH90 screw	304889
	2x M12-F-SL-WS 3/4" lock nut	382897
	Connector - MI120 options	
	2x MIA-OH120 screw	304890
	2x M12-F-SL-WS 3/4" lock nut	382897
	Piece of channel	
	1x MQ-41-F 3m channel	304099
	MQ-41-F 6m channel	304100
	Plastic endcap	
	2x MQZ-E41 plastic endcap	369685

3	MQ attachment MQ channel and connector MIC-MI/MQ	
	Connector	
	2x MIC-MI-/MQ-M8 connector	304882
	Piece of channel	
	1x MQ-41-F 3m channel	304099
	MQ-41-F 6m channel	304100
	Plastic endcap	
	2x MQZ-E41 plastic endcap	369685

Application description	Application	Product lines	Base material
MI/MIQ System - Strut clamps	18	MI/MIQ System	
General comments		Strut clamps	
<ul style="list-style-type: none"><li>Application subject to vertical loads caused by weight of the pipes Application not subjects to any thermal expansion or any other 3D loads</li><li>Loading and load impact must always be compared with 3D capacity limits for every single part of the application</li></ul>			

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# MI/MIQ - Roller connectors - Options

2	Double roll connector MRG-D6-F M12/M16 and piperings	
Roller connector		
1x	MRG-D6-F M12/M16 roller	304214
Connection to MQ attachment		
2x	MQIM-M12 wing nut	2120275
2x	M12x20-F hex. screw	2131566
Piece of threaded rod M12 or M16		
1x	AM12x1000-F 4.8 th. rod	304774
	AM16x1000-F 4.8 th. rod	304776
Pipering		
M12		
2x	MP-MXI-F 2" M10/M12	374897
	MP-MXI-F 2 1/2" M10/M12	374898
	MP-MXI-F 3" M10/M12	374899
M16		
	MP-MXI-F 4" M16	374900
	MP-MXI-F 125 M16	374901
	MP-MXI-F 133 M16	374902
	MP-MXI-F 5" M16	374903
	MP-MXI-F 159 M16	374904
	MP-MXI-F 6" M16	374905
	MP-MXI-F 177.8 M16	374906
	MP-MXI-F 193.7 M16	374907
	MP-MXI-F 210 M16	374908
	MP-MXI-F 219 M16	374909
	MP-MXI-F 244.5 M16	374910
	MP-MXI-F 267/274 M16	374911
	MP-MXI-F 275 M16	374912
	MP-MXI-F 324 M16	374913
	MP-MXI-F 326 M16	374914
	MP-MXI-F 355 M16	374915
	MP-MXI-F 368 M16	374916
	MP-MXI-F 406 M16	374917
	MP-MXI-F 457 M16	374918
	MP-MXI-F 508 M16	374919

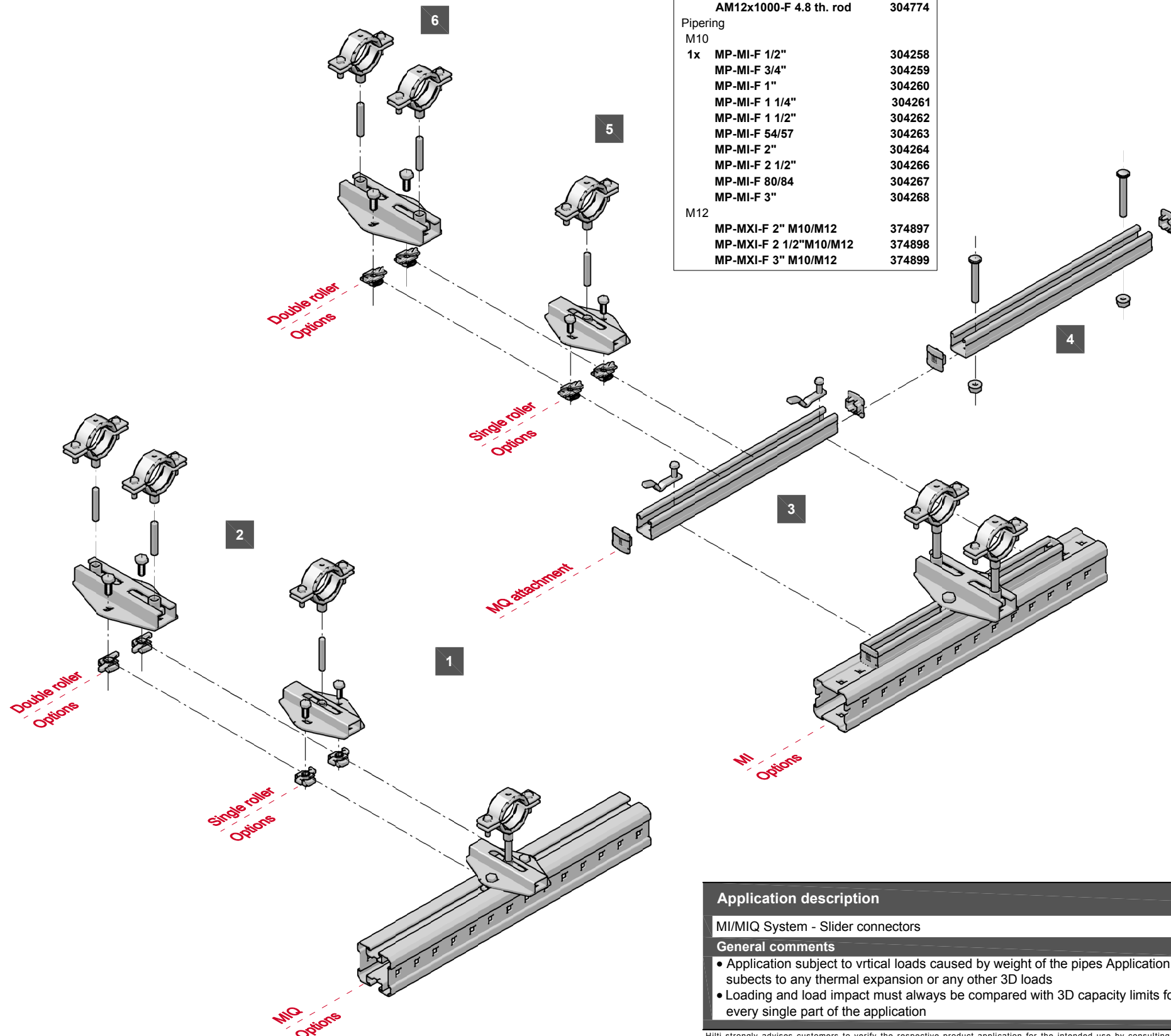
1	Single roll connector MRG 4.0 M10/M12 and piperings	
Roller connector		
1x	MRG 2.0 M10/M12-F roller	304213
Connection to MQ attachment		
2x	MQIM-M10 wing nut	2120274
2x	M10x20-F hex. screw	2131565
Piece of threaded rod M10 or M12		
1x	AM10x1000-F 4.8 th. rod	304773
	AM12x1000-F 4.8 th. rod	304774
Pipering		
M10		
1x	MP-MI-F 1/2"	304258
	MP-MI-F 3/4"	304259
	MP-MI-F 1"	304260
	MP-MI-F 1 1/4"	304261
	MP-MI-F 1 1/2"	304262
	MP-MI-F 54/57	304263
	MP-MI-F 2"	304264
	MP-MI-F 2 1/2"	304266
	MP-MI-F 80/84	304267
	MP-MI-F 3"	304268
M12		
	MP-MXI-F 2" M10/M12	374897
	MP-MXI-F 2 1/2"M10/M12	374898
	MP-MXI-F 3" M10/M12	374899

5	Single roll connector MRG 4.0 M10/M12 and piperings	
Roller connector		
1x	MRG 2.0 M10/M12-F roller	304213
Connection to MQ attachment		
2x	MQM-M10 HDG wing nut	298510
2x	M10x25-F hex. screw	304788
Piece of threaded rod M10 or M12		
1x	AM10x1000-F 4.8 th. rod	304773
	AM12x1000-F 4.8 th. rod	304774
Pipering		
M10		
1x	MP-MI-F 1/2"	304258
	MP-MI-F 3/4"	304259
	MP-MI-F 1"	304260
	MP-MI-F 1 1/4"	304261
	MP-MI-F 1 1/2"	304262
	MP-MI-F 54/57	304263
	MP-MI-F 2"	304264
	MP-MI-F 2 1/2"	304266
	MP-MI-F 80/84	304267
	MP-MI-F 3"	304268
M12		
	MP-MXI-F 2" M10/M12	374897
	MP-MXI-F 2 1/2" M10/M12	374898
	MP-MXI-F 3" M10/M12	374899

6	Double roll connector MRG-D6-F M12/M16 and piperings	
Roller connector		
1x	MRG-D6-F M12/M16 roller	304214
Connection to MQ attachment		
2x	MQM-M12-F wing nut	304134
2x	M12x25-F hex. screw	304789
Piece of threaded rod M12 or M16		
1x	AM12x1000-F 4.8 th. rod	304774
	AM16x1000-F 4.8 th. rod	304776
Pipering		
M12		
2x	MP-MXI-F 2" M10/M12	374897
	MP-MXI-F 2 1/2" M10/M12	374898
	MP-MXI-F 3" M10/M12	374899
M16		
	MP-MXI-F 4" M16	374900
	MP-MXI-F 125 M16	374901
	MP-MXI-F 133 M16	374902
	MP-MXI-F 5" M16	374903
	MP-MXI-F 159 M16	374904
	MP-MXI-F 6" M16	374905
	MP-MXI-F 177.8 M16	374906
	MP-MXI-F 193.7 M16	374907
	MP-MXI-F 210 M16	374908
	MP-MXI-F 219 M16	374909
	MP-MXI-F 244.5 M16	374910
	MP-MXI-F 267/274 M16	374911
	MP-MXI-F 275 M16	374912
	MP-MXI-F 324 M16	374913
	MP-MXI-F 326 M16	374914
	MP-MXI-F 355 M16	374915
	MP-MXI-F 368 M16	374916
	MP-MXI-F 406 M16	374917
	MP-MXI-F 457 M16	374918
	MP-MXI-F 508 M16	374919

4	MQ attachment	
	MQ channel and screws MIA-OH	
Connector - MI-90 options		
2x	MIA-OH90 screw	304889
2x	M12-F-SL-WS 3/4" lock nut	382897
Connector - MI120 options		
2x	MIA-OH120 screw	304890
2x	M12-F-SL-WS 3/4" lock nut	382897
Piece of channel		
1x	MQ-41-F 3m channel	304099
	MQ-41-F 6m channel	304100
Plastic endcap		
2x	MQZ-E41 plastic endcap	369685

3	MQ attachment	
	MQ channel and connector MIC-MI/MQ	
Connector		
2x	MIC-MI-/MQ-M8 connector	304882
Piece of channel		
1x	MQ-41-F 3m channel	304099
	MQ-41-F 6m channel	304100
Plastic endcap		
2x	MQZ-E41 plastic endcap	369685



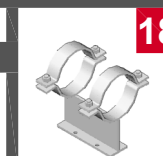
## Application description

MI/MIQ System - Slider connectors

## General comments

- Application subject to vertical loads caused by weight of the pipes Application not subjects to any thermal expansion or any other 3D loads
- Loading and load impact must always be compared with 3D capacity limits for every single part of the application

## Application



18

## Product lines

Base material
MI/MIQ System
Slider / rollers
Pipe rings

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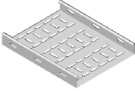
MI/MIQ - Cable Tray - Options

1	Hexagon screw and MQIM wing nut M10, M12	
M10		
2x	MQIM-M10 wing nut	2120274
2x	A10.5/20-F washer	304770
2x	M10x20-F hex. screw	2151565
M12		
2x	MQIM-M12 wing nut	2120275
2x	A13/24-F washer	304771
2x	M12x20-F hex. screw	2131566

4	Hexagon screw and MQM wing nut M8, M10, M12	
M8		
2x	MQM-M8 HDG wing nut	298500
2x	A8.4/16-F washer	304769
2x	M8x25-F hex. screw	304787
M10		
2x	MQM-M10 wing nut	298510
2x	A10.5/20-F washer	304770
2x	M10x25-F hex. screw	304788
M12		
2x	MQM-M12-F wing nut	304134
2x	A13/24-F washer	304771
2x	M12x25-F hex. screw	304789

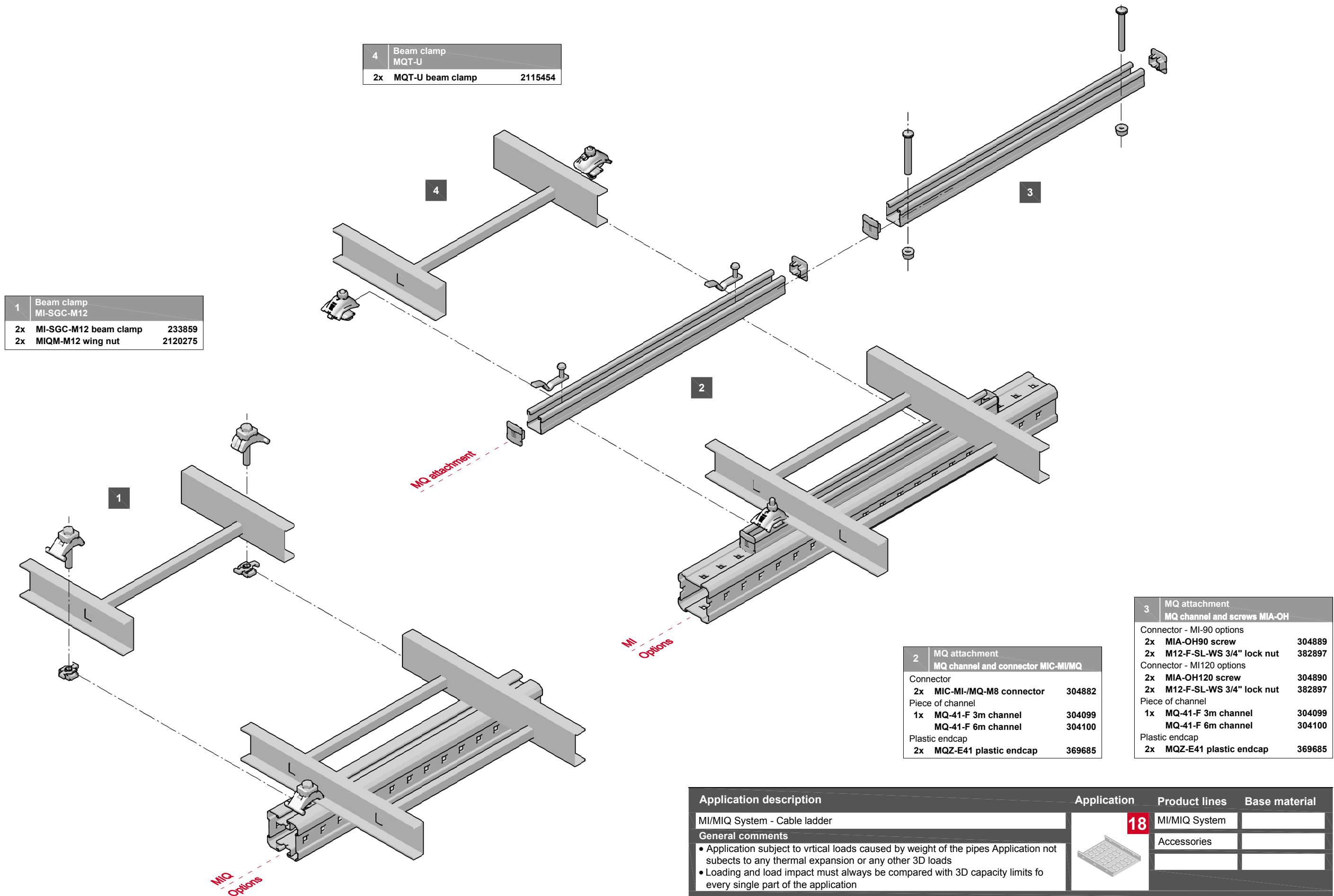
3	MQ attachment	
	MQ channel and screws MIA-OH	
Connector - MI-90 options		
2x	MIA-OH90 screw	304889
2x	M12-F-SL-WS 3/4" lock nut	382897
Connector - MI120 options		
2x	MIA-OH120 screw	304890
2x	M12-F-SL-WS 3/4" lock nut	382897
Piece of channel		
1x	MQ-41-F 3m channel	304099
	MQ-41-F 6m channel	304100
Plastic endcap		
2x	MQZ-E41 plastic endcap	369685

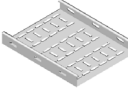
2	MQ attachment	
	MQ channel and connector MIC-MI/MQ	
Connector		
2x	MIC-MI-/MQ-M8 connector	304882
Piece of channel		
1x	MQ-41-F 3m channel	304099
	MQ-41-F 6m channel	304100
Plastic endcap		
2x	MQZ-E41 plastic endcap	369685

Application description	Application	Product lines	Base material
MI/MIQ System - Cable tray	 <div>18</div>	MI/MIQ System	
General comments		Accessories	
<ul style="list-style-type: none"><li>• Application subject to vrtical loads caused by weight of the pipes Application not subects to any thermal expansion or any other 3D loads</li><li>• Loading and load impact must always be compared with 3D capacity limits fo every single part of the application</li></ul>			

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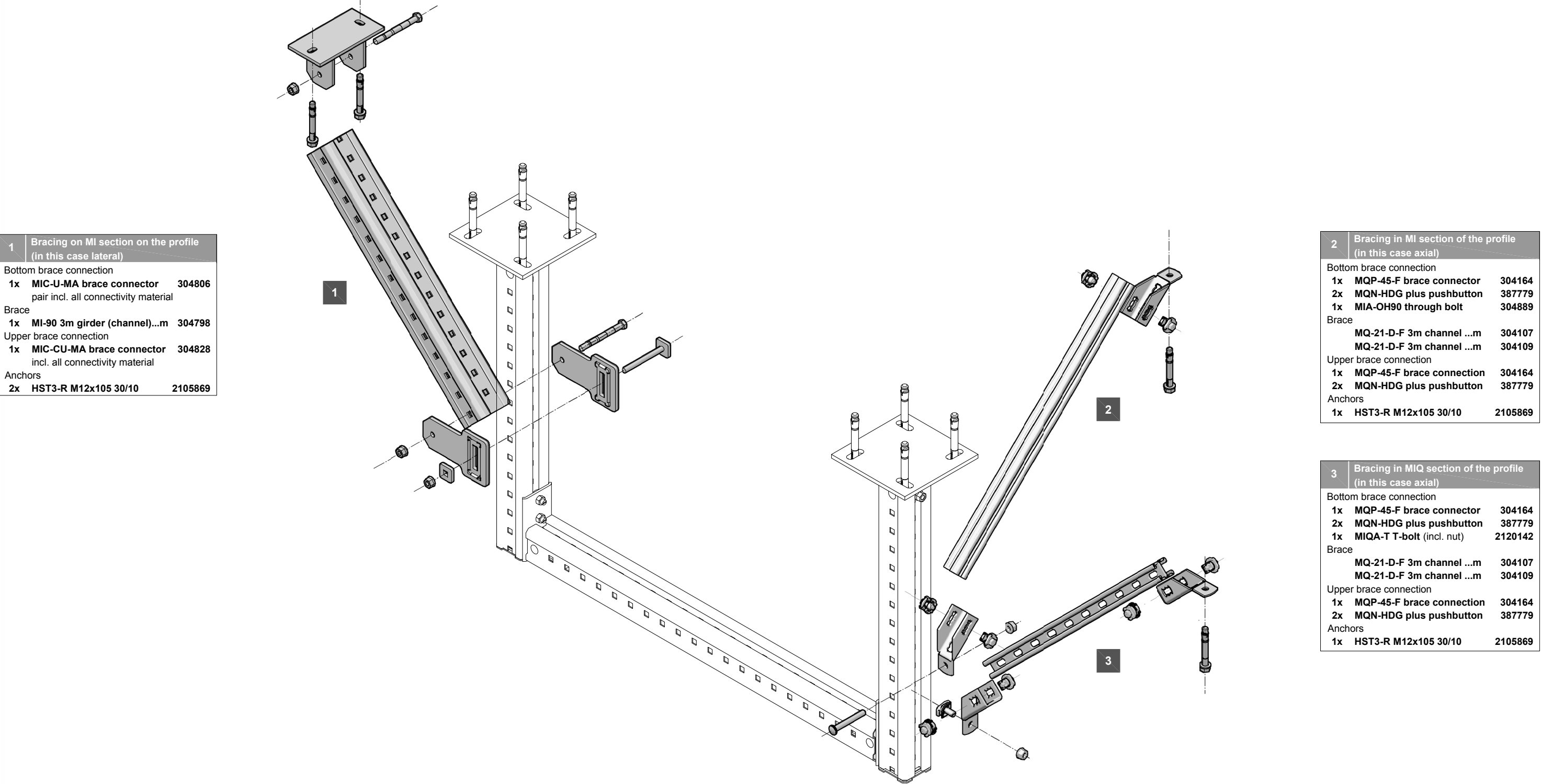
MI/MIQ - Cable Ladder - Fixed Options




Application description	Application	Product lines	Base material
MI/MIQ System - Cable ladder	 <b>18</b>	MI/MIQ System	
General comments		Accessories	
<ul style="list-style-type: none"><li>• Application subject to vertical loads caused by weight of the pipes Application not subjects to any thermal expansion or any other 3D loads</li><li>• Loading and load impact must always be compared with 3D capacity limits for every single part of the application</li></ul>			

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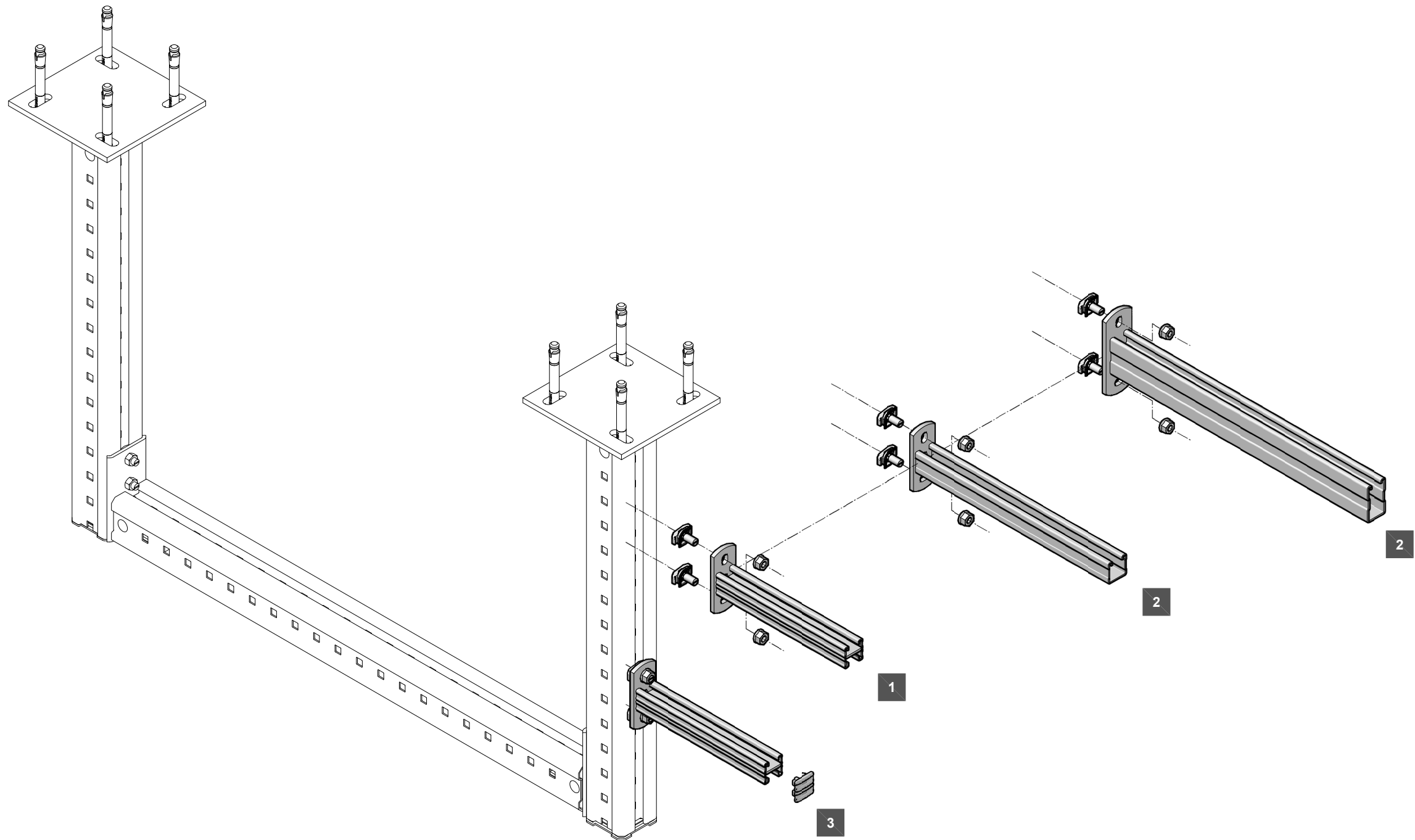
MI/MIQ System - Trapeze On Concrete - Stiffeing Options



Application description		Application	Product lines	Base material
MI/MIQ System - Trapeze On Concrete		 <div>1</div>	MIQ System	Concrete
General comments			MI System	
<ul style="list-style-type: none"><li>• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations</li></ul>			MQ-F System	

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MI/MIQ System - Trapeze Frame On Concrete - MQ Compatibility Options



1	Single MQK-F brackets fixed to MIQ girder	
T-bolts		
2x	MIQA-T T bolt incl. nut	2120142
MQK-F brackets		
1x	MQK-21/300-F bracket	304113
	MQK-21/450-F bracket	304114
	MQK-41/300-F bracket	304115
	MQK-41/450-F bracket	304116
	MQK-41/600-F bracket	304117
	MQK-41/1000-F bracket	304117
	MQK-72/450-F bracket	304122
	MQK-72/600-F bracket	304123

2	Double MQK-F brackets fixed to MIQ girder	
T-bolts		
2x	MIQA-T T bolt incl. nut	2120142
MQK-F brackets		
1x	MQK-21 D/300-F bracket	304124
	MQK-21 D/450-F bracket	304125
	MQK-41 D/600-F bracket	304126
	MQK-41 D/1000-F bracket	304127

8	Plastic end caps for MQ channels Plastic end caps MQZ-E	
	MQZ-E21 end cap	370598
	MQZ-E31 end cap	369686
	MQZ-E41 end cap	369685

Application description	Application	Product lines	Base material
MIQ System - Trapeze Frame	 <div>1</div>	MIQ System	
General comments		MQ-F System	
• These illustrations do not show any loading capacity limits, load exposure or limitations applicable to any load combinations			

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