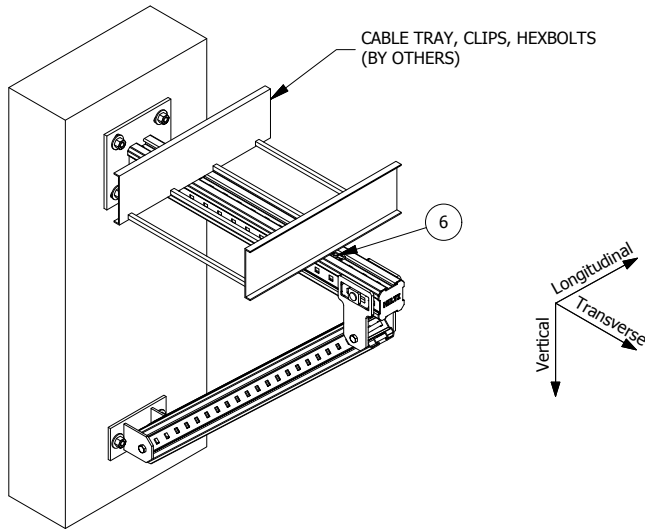
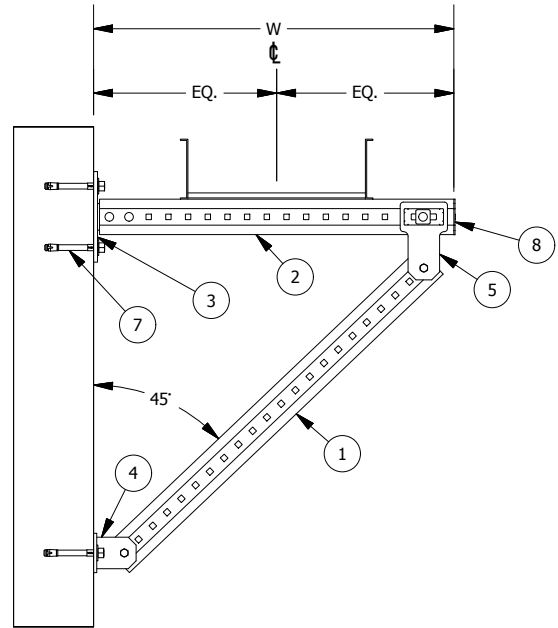


Piece Mark	Item No.*	Description	Qty.*
1	2119866	GIRDER MIQ-90	1
2	2119866	GIRDER MIQ-90	1
3	2120144	MIQC-C90 BASE PLATE	1
4	2174664	CONNECTOR MIC-CU-MAH CONCRETE	1
5	304806	CONNECTOR MIC-U-MA	1
6	2183584	MIQM 3/8" WING NUT	2
7	VARIES	USE APPROPRIATE HILTI ANCHOR	6
8	432077	END CAP - MIA-EC-90	1



ISOMETRIC
(SCALE 5/8"=1'-0")



ELEVATION
(SCALE 5/8"=1'-0")

LRFD, lbs	Max W, in	36
	Vertical	3000
	Transverse	1800
ASD, lbs	Vertical	210
	Transverse	140
	Longitudinal	160

NOTE(S):

- THIS DRAWING REPRESENTS A COMMON CONFIGURATION FOR THIS APPLICATION. THE CABLE TRAY (CT) SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON HILTI -PUBLISHED STATIC LOAD DATA AND DESIGN METHODOLOGIES, AND GENERIC, NON-PROJECT SPECIFIC DESIGN ASSUMPTIONS. THE ENGINEERING OF RECORD SHALL EVALUATE THIS SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL, PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRIC LOADS INCLUDED. CT CONNECTION HARDWARE MUST BE CHECKED SEPARATELY.
- DESIGN ASSUMPTIONS: IBC 2012 BUILDING CODE; SEE TABLE FOR DESIGN LOADS (STATIC U.N.O.)
- REFER TO COMPONENT MANUFACTURER'S IFU'S FOR REQUIRED INSTALLATION INFORMATION.
- FOR APPLICABLE CONCRETE OR STEEL ANCHOR DESIGN CONTACT HILTI OR THE PROJECT SITE ENGINEER OF RECORD.
- CAPACITIES SHOWN ABOVE ARE BASED ON VERTICAL COMBINED WITH TRANSVERSE AND VERTICAL COMBINED WITH LONGITUDINAL. A SEPERATE ANALYSIS MUST BE PERFORMED IF VERTICAL, TRANSVERSE AND LONGITUDINAL LOADS OCCUR SIMULTANEOUSLY.
- ANCHOR CAPACITIES NOT CONSIDERED.

REVISION HISTORY

NO:	DESCRIPTION:	DATE:
A	NOT FOR CONSTRUCTION	10/06/2017

PROJECT NAME:

**TYPICAL DETAILS
TD-CT-BC105-C**

PROJECT DESCRIPTION:

**CABLE TRAY BRACED CANTILEVER
CONCRETE**

HILTI

DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
GAB	IDP	OMO	JWP

PAPER SIZE:

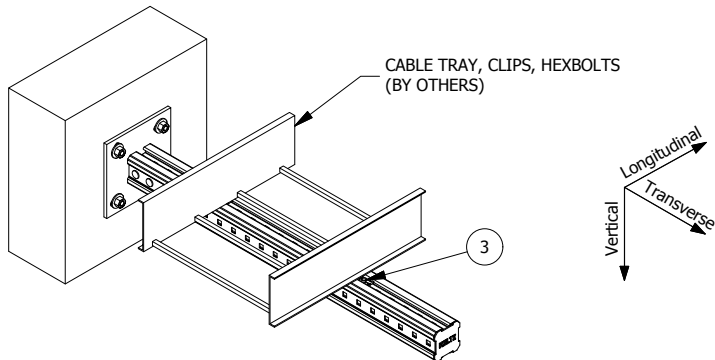
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PROJECT NUMBER:

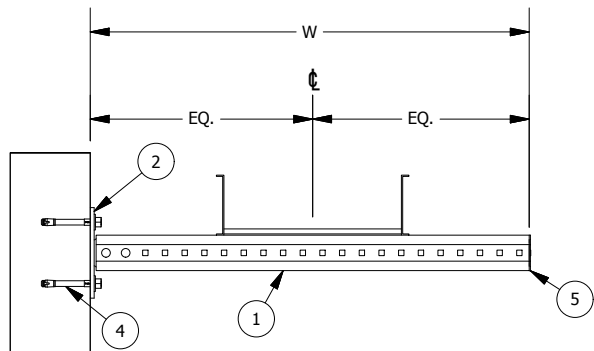
PROJECT 10017 - JOB CT - SHEET 1

All loading and design criteria supplied by customer is assumed accurate. Only the stated Design Assumptions were considered, and must be verified by the responsible Engineer of Record (EOR). The basis of Hilti component and connection design is the published data in the current Hilti Technical Guide, including material and cross-section properties, allowable load values, factors of safety, methods of calculation, and limiting factors. The EOR must verify suitability for any specific application, and the capacity of the supportive structure to receive the shown configuration and associated reaction loads. Modification to components and/or design may alter performance and must be evaluated by the EOR.

Piece Mark	Item No.*	Description	Qty.*
1	2119866	GIRDER MIQ-90	1
2	2120144	MIQC-C90 BASE PLATE	1
3	2183584	MIQM 3/8" WING NUT	2
4	VARIES	USE APPROPRIATE HILTI ANCHOR	4
5	432077	END CAP - MIA-EC-90	1



ISOMETRIC
(SCALE 5/8"=1'-0")



ELEVATION
(SCALE 5/8"=1'-0")

LRFD, lbs	Max W, in	36
	Vertical	500
	Transverse	400
ASD, lbs	Longitudinal	80
	Vertical	350
	Transverse	70
	Longitudinal	50

NOTE(S):

- THIS DRAWING REPRESENTS A COMMON CONFIGURATION FOR THIS APPLICATION. THE CABLE TRAY (CT) SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON HILTI -PUBLISHED STATIC LOAD DATA AND DESIGN METHODOLOGIES, AND GENERIC, NON-PROJECT SPECIFIC DESIGN ASSUMPTIONS. THE ENGINEERING OF RECORD SHALL EVALUATE THIS SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL, PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRIC LOADS INCLUDED. CT CONNECTION HARDWARE MUST BE CHECKED SEPARATELY.
- DESIGN ASSUMPTIONS: IBC 2012 BUILDING CODE; SEE TABLE FOR DESIGN LOADS (STATIC U.N.O.)
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- FOR APPLICABLE CONCRETE OR STEEL ANCHOR DESIGN CONTACT HILTI OR THE PROJECT SITE ENGINEER OF RECORD.
- CAPACITIES SHOWN ABOVE ARE BASED ON VERTICAL COMBINED WITH TRANSVERSE AND VERTICAL COMBINED WITH LONGITUDINAL. A SEPERATE ANALYSIS MUST BE PERFORMED IF VERTICAL, TRANSVERSE AND LONGITUDINAL LOADS OCCUR SIMULTANEOUSLY.
- ANCHOR CAPACITIES NOT CONSIDERED.

REVISION HISTORY

NO:	DESCRIPTION:	DATE:
A	NOT FOR CONSTRUCTION	10/06/2017

PROJECT NAME:

**TYPICAL DETAILS
TD-CT-C108-C**

PROJECT DESCRIPTION:

CABLE TRAY CANTILEVER CONCRETE

HILTI

DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
GAB	IDP	OMO	JWP

PAPER SIZE:

ANSI A

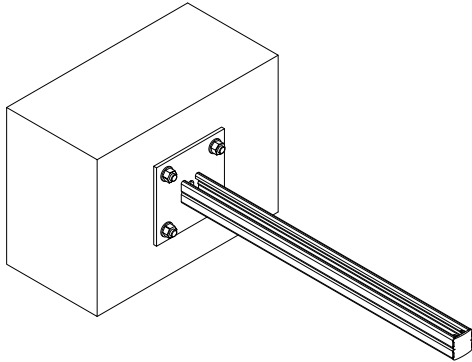
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PROJECT 10017 - JOB CT - SHEET 1

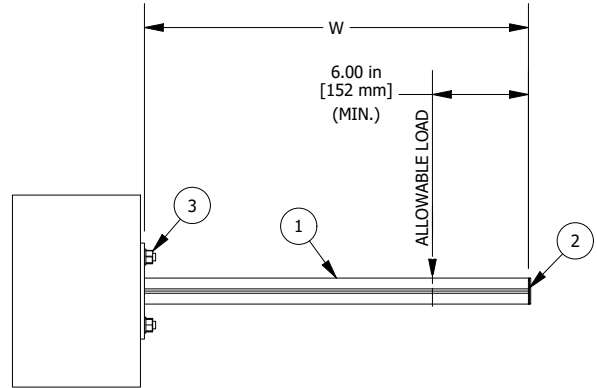
All loading and design criteria supplied by customer is assumed accurate. Only the stated Design Assumptions were considered, and must be verified by the responsible Engineer of Record (EOR). The basis of Hilti component and connection design is the published data in the current Hilti Technical Guide, including material and cross-section properties, allowable load values, factors of safety, methods of calculation, and limiting factors. The EOR must verify suitability for any specific application, and the capacity of the supportive structure to receive the shown configuration and associated reaction loads. Modification to components and/or design may alter performance and must be evaluated by the EOR.

Piece Mark	Item No.*	Description	Qty.*
1	VARIES	MQK-158/4-F-XX (SEE TABLE A)	1
2	244886	CHANNEL END CAP MEK RED	1
3	387527	KB-TZ SS304 1/2 X 4 1/2 (SEE NOTE G)	4

TABLE - A	
MQK-158/4-F-XX ITEM NO.	MQK-158/4-F-XX DESCRIPTION
2248531	MQK-158/4-F-24
2248530	MQK-158/4-F-36
2248532	MQK-158/4-F-48



ISOMETRIC
(SCALE 1"=1'-0")



ELEVATION
(SCALE 1"=1'-0")

ALLOWABLE LOAD TABLE			
Max W, in	24	36	48
ALLOWABLE LOADS, lbs	205	115	60

NOTE(S):

- A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS INSTALL SOFTWARE VERSION 2.23. SEE ALLOWABLE LOAD TABLE FOR MAXIMUM ALLOWABLE LOAD AND DIMENSION. THE ENGINEER OF RECORD SHALL EVALUATE THIS TYPICAL SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- B. THE EVALUATION OF EXISTING STRUCTURE IS OUTSIDE OF THE TYPICAL DESIGN SCOPE AND SHALL BE PERFORMED BY THE ENGINEER OF RECORD.
- C. TYPICAL SUPPORT DESIGN IS BASED ON INTERNATIONAL BUILDING CODE (IBC) 2015. SEE TABLES IN DETAILS FOR ALLOWABLE DESIGN LOADS (STATIC U.N.O.)
- D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
- E. MAXIMUM ALLOWABLE LOAD TABLE SHOWN IN THE TYPICAL DETAILS ARE BASED ON THE VERTICAL LOAD ONLY. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY WITH VERTICAL LOAD.
- F. REFER TO COMPONENT MANUFACTURER'S IFU'S FOR REQUIRED INSTALLATION INFORMATION.
- G. MIN. CONCRETE COMPRESSIVE STRENGTH F'C=3000 PSI, MIN. CONCRETE EDGE DISTANCE = 4" INCHES, MIN. EFFECTIVE EMBEDMENT Heff = 2.0 INCHES
- H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR REACTIONS AT BASE DUE TO REVISION DEAD LOAD.

REVISION HISTORY

DATE:	COMMENT:
07/28/2020	ISSUE FOR USE

All loading and design criteria supplied by customer is assumed accurate. Only the stated Design Assumptions were considered, and must be verified by the responsible Engineer of Record (EOR). The basis of Hilti component and connection design is the published data in the current Hilti Technical Guide, including material and cross-section properties, allowable load values, factors of safety, methods of calculation, and limiting factors. The EOR must verify suitability for any specific application, and the capacity of the supportive structure to receive the shown configuration and associated reaction loads. Modification to components and/or design may alter performance and must be evaluated by the EOR.

TYPICAL DETAIL NAME:

**TYPICAL DETAILS
TD-P/CT-C01-C**

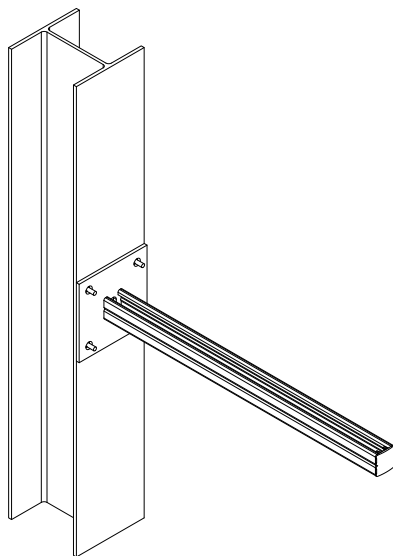
TYPICAL DETAIL DESCRIPTION:

MQK-158/4-F CANTILEVER CONCRETE

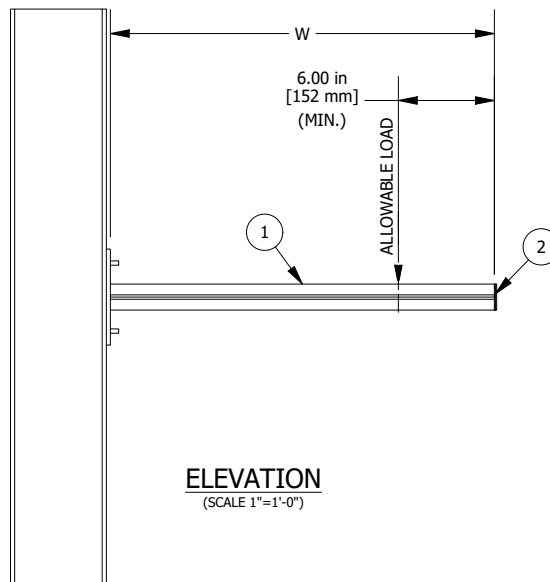
HILTI			
DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
JRS	GAB	ISE	ISE
PAPER SIZE:	TYPICAL DETAIL NUMBER:		
ANSI A	DETAIL	SHEET	
	TD-P/CT-C01-C	-	1

Piece Mark	Item No.*	Description	Qty.*
1	VARIES	4-HOLE BRACKET MQK-158/4-F-XX (SEE TABLE A)	1
2	244886	CHANNEL END CAP MEK RED	1
3	2194340	THREADED STUD X-BT-M10/15 SN 8 (SEE NOTE G)	4

TABLE A	
MQK-158/4-F-XX ITEM NO.	MQK-158/4-F-XX DESCRIPTION
2248531	MQK-158/4-F-24
2248530	MQK-158/4-F-36
2248532	MQK-158/4-F-48



ISOMETRIC
(SCALE 1"=1'-0")



ELEVATION
(SCALE 1"=1'-0")

ALLOWABLE LOAD TABLE			
Max W, in	24	36	48
ALLOWABLE LOADS, lbs	205	115	60

NOTE(S):

- A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS INSTALL SOFTWARE VERSION 2.23. SEE ALLOWABLE LOAD TABLE FOR MAXIMUM ALLOWABLE LOAD AND DIMENSION. THE ENGINEER OF RECORD SHALL EVALUATE THIS TYPICAL SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- B. THE EVALUATION OF EXISTING STRUCTURE IS OUTSIDE OF THE TYPICAL DESIGN SCOPE AND SHALL BE PERFORMED BY THE ENGINEER OF RECORD.
- C. TYPICAL SUPPORT DESIGN IS BASED ON INTERNATIONAL BUILDING CODE (IBC) 2015. SEE TABLES IN DETAILS FOR ALLOWABLE DESIGN LOADS (STATIC U.N.O.)
- D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
- E. MAXIMUM ALLOWABLE LOAD TABLE SHOWN IN THE TYPICAL DETAILS ARE BASED ON THE VERTICAL LOAD A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY WITH VERTICAL LOAD.
- F. REFER TO COMPONENT MANUFACTURER'S IFU'S FOR REQUIRED INSTALLATION INFORMATION.
- G. MIN. STEEL BASE THICKNESS SHALL BE 5/16". MIN EDGE DISTANCE SHALL BE 3/8". MIN YIELD STRENGTH OF STEEL SHALL BE F_y=36KSI

REVISION HISTORY

DATE:	COMMENT:
07/28/2020	ISSUE FOR USE

TYPICAL DETAIL NAME:

**TYPICAL DETAILS
TD-P/CT-C02-S**

TYPICAL DETAIL DESCRIPTION:

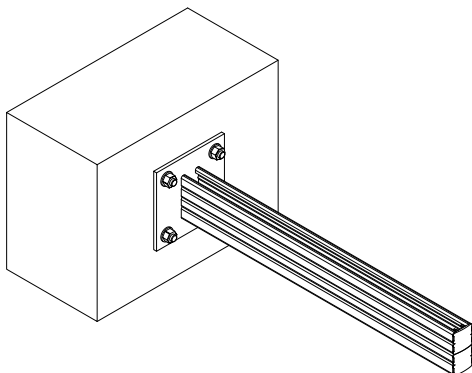
MQK-158/4-F CANTILEVER STEEL

HILTI			
DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
JRS	GAB	ISE	ISE
PAPER SIZE:	TYPICAL DETAIL NUMBER:		
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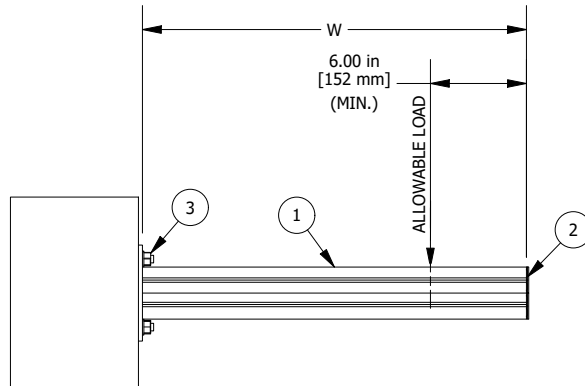
All loading and design criteria supplied by customer is assumed accurate. Only the stated Design Assumptions were considered, and must be verified by the responsible Engineer of Record (EOR). The basis of Hilti component and connection design is the published data in the current Hilti Technical Guide, including material and cross-section properties, allowable load values, factors of safety, methods of calculation, and limiting factors. The EOR must verify suitability for any specific application, and the capacity of the supportive structure to receive the shown configuration and associated reaction loads. Modification to components and/or design may alter performance and must be evaluated by the EOR.

Piece Mark	Item No.*	Description	Qty.*
1	VARIES	MQK-158/4-D-F-XX (SEE TABLE A)	1
2	244886	CHANNEL END CAP MEK RED	2
3	387527	KB-TZ SS304 1/2 X 4 1/2 (SEE NOTE G)	4

TABLE-A	
MQK-158/4-D-F-XX ITEM NO.	MQK-158/4-D-F-XX DESCRIPTION
2248533	MQK-158/4-D-F-24
2248534	MQK-158/4-D-F-36
2248535	MQK-158/4-D-F-48



ISOMETRIC
(SCALE 1"=1'-0")



ELEVATION
(SCALE 1"=1'-0")

ALLOWABLE LOAD TABLE			
Max W, in	24	36	48
ALLOWABLE LOADS, lbs	619	375	256

NOTE(S):

- A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS INSTALL SOFTWARE VERSION 2.23. SEE ALLOWABLE LOAD TABLE FOR MAXIMUM ALLOWABLE LOAD AND DIMENSION. THE ENGINEER OF RECORD SHALL EVALUATE THIS TYPICAL SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- B. THE EVALUATION OF EXISTING STRUCTURE IS OUTSIDE OF THE TYPICAL DESIGN SCOPE AND SHALL BE PERFORMED BY THE ENGINEER OF RECORD.
- C. TYPICAL SUPPORT DESIGN IS BASED ON INTERNATIONAL BUILDING CODE (IBC) 2015. SEE TABLES IN DETAILS FOR ALLOWABLE DESIGN LOADS (STATIC U.N.O.)
- D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
- E. MAXIMUM ALLOWABLE LOAD TABLE SHOWN IN THE TYPICAL DETAILS ARE BASED ON THE VERTICAL LOAD A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY WITH VERTICAL LOAD.
- F. REFER TO COMPONENT MANUFACTURER'S IFU'S FOR REQUIRED INSTALLATION INFORMATION.
- G. MIN. CONCRETE COMPRESSIVE STRENGTH F'C=3000 PSI, MIN. CONCRETE EDGE DISTANCE = 4" INCHES, MIN. EFFECTIVE EMBEDMENT Heff = 2.0" INCHES.
- H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR REACTION AT BASE PLATE DUE TO VERTICAL DEAD LOAD.

REVISION HISTORY

DATE:	COMMENT:
07/28/2020	ISSUE FOR USE

TYPICAL DETAIL NAME:

**TYPICAL DETAILS
TD-P/CT-C03-C**

TYPICAL DETAIL DESCRIPTION:

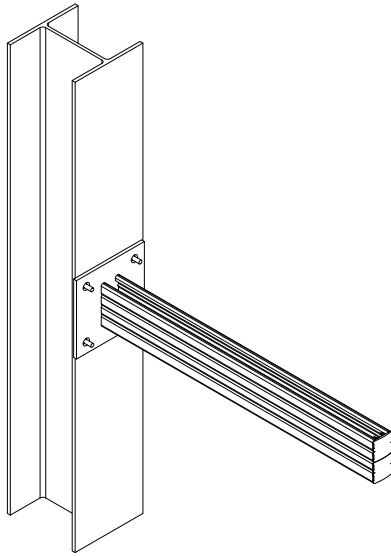
MQK-158/4-D-F CANTILEVER CONCRETE

HILTI			
DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
JRS	GAB	ISE	ISE
PAPER SIZE:		TYPICAL DETAIL NUMBER:	
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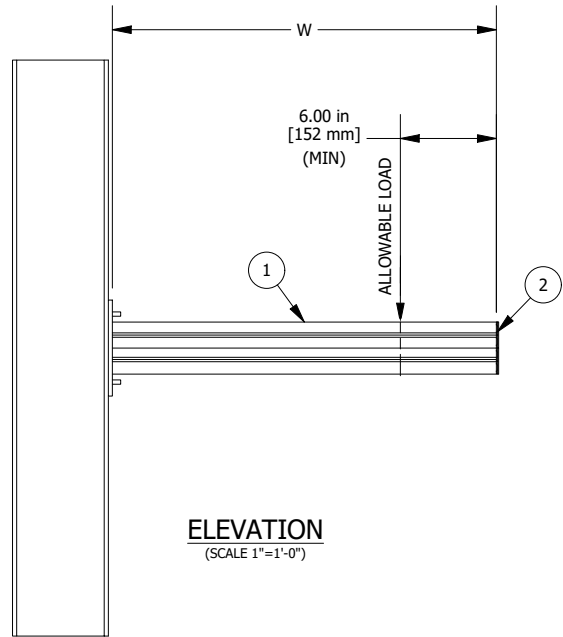
All loading and design criteria supplied by customer is assumed accurate. Only the stated Design Assumptions were considered, and must be verified by the responsible Engineer of Record (EOR). The basis of Hilti component and connection design is the published data in the current Hilti Technical Guide, including material and cross-section properties, allowable load values, factors of safety, methods of calculation, and limiting factors. The EOR must verify suitability for any specific application, and the capacity of the supportive structure to receive the shown configuration and associated reaction loads. Modification to components and/or design may alter performance and must be evaluated by the EOR.

Piece Mark	Item No.*	Description	Qty.*
1	VARIES	MQK-158/4-D-F-XX (SEE TABLE A)	1
2	244886	CHANNEL END CAP MEK RED	2
3	2194340	THREADED STUD X-BT-M10/15 SN 8 (SEE NOTE G)	4

TABLE A	
MQK-158/4-D-F-XX ITEM NO.	MQK-158/4-D-F-XX DESCRIPTION
2248533	MQK-158/4-D-F-24
2248534	MQK-158/4-D-F-36
2248535	MQK-158/4-D-F-48



ISOMETRIC
(SCALE 1"=1'-0")



ELEVATION
(SCALE 1"=1'-0")

ALLOWABLE LOAD TABLE			
Max W, in	24	36	48
ALLOWABLE LOADS, lbs	345	220	155

NOTE(S):

- A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS INSTALL SOFTWARE VERSION 2.23. SEE ALLOWABLE LOAD TABLE FOR MAXIMUM ALLOWABLE LOAD AND DIMENSION. THE ENGINEER OF RECORD SHALL EVALUATE THIS TYPICAL SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- B. THE EVALUATION OF EXISTING STRUCTURE IS OUTSIDE OF THE TYPICAL DESIGN SCOPE AND SHALL BE PERFORMED BY THE ENGINEER OF RECORD.
- C. TYPICAL SUPPORT DESIGN IS BASED ON INTERNATIONAL BUILDING CODE (IBC) 2015. SEE TABLES IN DETAILS FOR ALLOWABLE DESIGN LOADS (STATIC U.N.O.)
- D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
- E. MAXIMUM ALLOWABLE LOAD TABLE SHOWN IN THE TYPICAL DETAILS ARE BASED ON THE VERTICAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY WITH VERTICAL LOAD.
- F. REFER TO COMPONENT MANUFACTURER'S IFU'S FOR REQUIRED INSTALLATION INFORMATION.
- G. MIN. STEEL BASE THICKNESS SHALL BE 5/16". MIN EDGE DISTANCE SHALL BE 3/8". MIN YIELD STRENGTH OF STEEL SHALL BE F_y=36KSI

REVISION HISTORY

DATE:	COMMENT:
07/28/2020	ISSUE FOR USE

TYPICAL DETAIL NAME:

**TYPICAL DETAILS
TD-P/CT-C04-S**

TYPICAL DETAIL DESCRIPTION:

MQK-158/4-D-F CANTILEVER STEEL

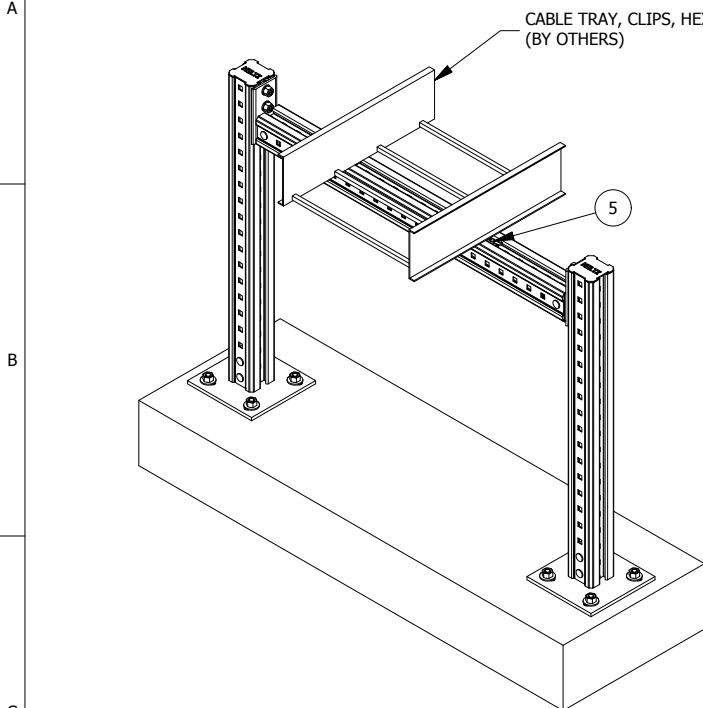


DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
JRS	GAB	ISE	ISE

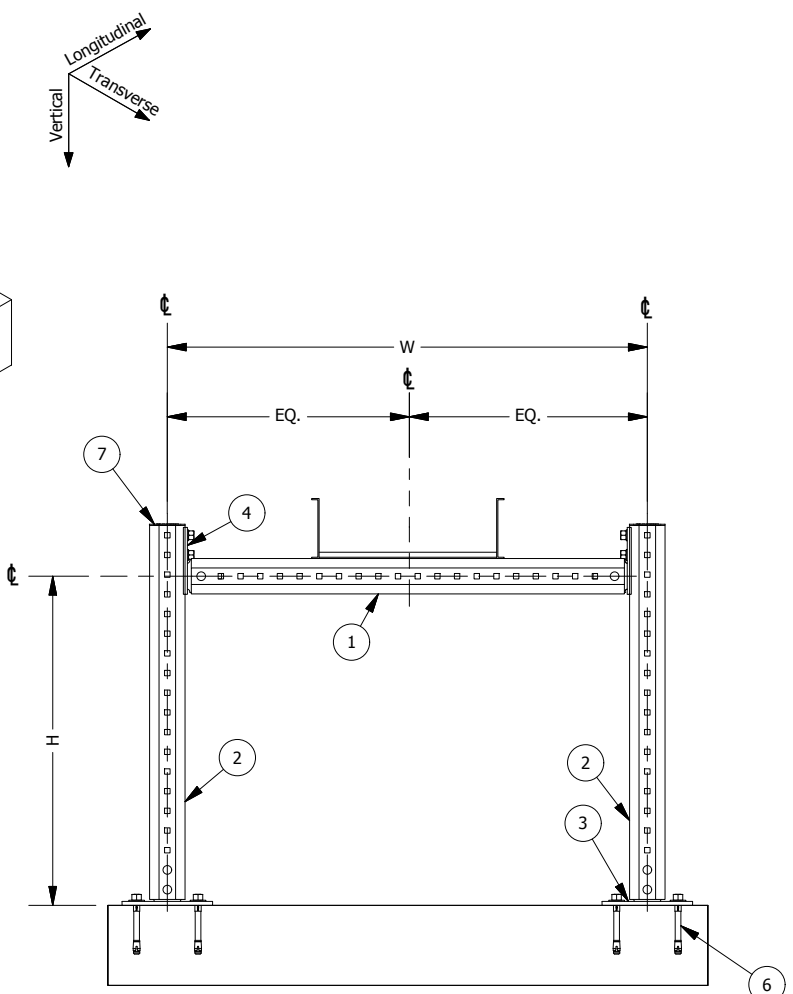
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ANSI A	DETAIL	SHEET
	TD-P/CT-C04-S	1

All loading and design criteria supplied by customer is assumed accurate. Only the stated Design Assumptions were considered, and must be verified by the responsible Engineer of Record (EOR). The basis of Hilti component and connection design is the published data in the current Hilti Technical Guide, including material and cross-section properties, allowable load values, factors of safety, methods of calculation, and limiting factors. The EOR must verify suitability for any specific application, and the capacity of the supportive structure to receive the shown configuration and associated reaction loads. Modification to components and/or design may alter performance and must be evaluated by the EOR.

Piece Mark	Item No.*	Description	Qty.*
1	2119866	GIRDER MIQ-90	1
2	2119866	GIRDER MIQ-90	2
3	2120144	MIQC-C90 BASE PLATE	2
4	2123881	MIQC-90HT	2
5	2183584	MIQM 3/8" WING NUT	2
6	VARIES	USE APPROPRIATE HILTI ANCHOR	8
7	432077	END CAP - MIA-EC-90	2



ISOMETRIC
(SCALE 5/8"=1'-0")



ELEVATION
(SCALE 5/8"=1'-0")

LRFD, lbs	Max W, in	72
	Max H, in	48
	Vertical	3400
ASD, lbs	Transverse	94
	Longitudinal	570
	Vertical	1080
	Transverse	230
	Longitudinal	336

NOTE(S):

- THIS DRAWING REPRESENTS A COMMON CONFIGURATION FOR THIS APPLICATION. THE CABLE TRAY (CT) SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON HILTI - PUBLISHED STATIC LOAD DATA AND DESIGN METHODOLOGIES, AND GENERIC, NON-PROJECT SPECIFIC DESIGN ASSUMPTIONS. THE ENGINEERING OF RECORD SHALL EVALUATE THIS SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL, PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRIC LOADS INCLUDED. CT CONNECTION HARDWARE MUST BE CHECKED SEPARATELY.
- DESIGN ASSUMPTIONS: IBC 2012 BUILDING CODE; SEE TABLE FOR DESIGN LOADS (STATIC U.N.O.)
- REFER TO COMPONENT MANUFACTURER'S IFU'S FOR REQUIRED INSTALLATION INFORMATION.
- FOR APPLICABLE CONCRETE OR STEEL ANCHOR DESIGN CONTACT HILTI OR THE PROJECT SITE ENGINEER OF RECORD.
- CAPACITIES SHOWN ABOVE ARE BASED ON VERTICAL COMBINED WITH TRANSVERSE AND VERTICAL COMBINED WITH LONGITUDINAL. A SEPERATE ANALYSIS MUST BE PERFORMED IF VERTICAL, TRANSVERSE AND LONGITUDINAL LOADS OCCUR SIMULTANEOUSLY.
- ANCHOR CAPACITIES NOT CONSIDERED.

REVISION HISTORY		
NO:	DESCRIPTION:	DATE:
A	NOT FOR CONSTRUCTION	10/06/2017

PROJECT NAME:
**TYPICAL DETAILS
TD-CT-GP110-C**

PROJECT DESCRIPTION:
CABLE TRAY GOALPOST CONCRETE

All loading and design criteria supplied by customer is assumed accurate. Only the stated Design Assumptions were considered, and must be verified by the responsible Engineer of Record (EOR). The basis of Hilti component and connection design is the published data in the current Hilti Technical Guide, including material and cross-section properties, allowable load values, factors of safety, methods of calculation, and limiting factors. The EOR must verify suitability for any specific application, and the capacity of the supportive structure to receive the shown configuration and associated reaction loads. Modification to components and/or design may alter performance and must be evaluated by the EOR.

HILTI

DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
GAB	BAP	OMO	JWP
PAPER SIZE:		PROJECT NUMBER:	
ANSI A	10017 -	CT -	1

1 2 3 4 5 6

A

B

C

D

E

F

A

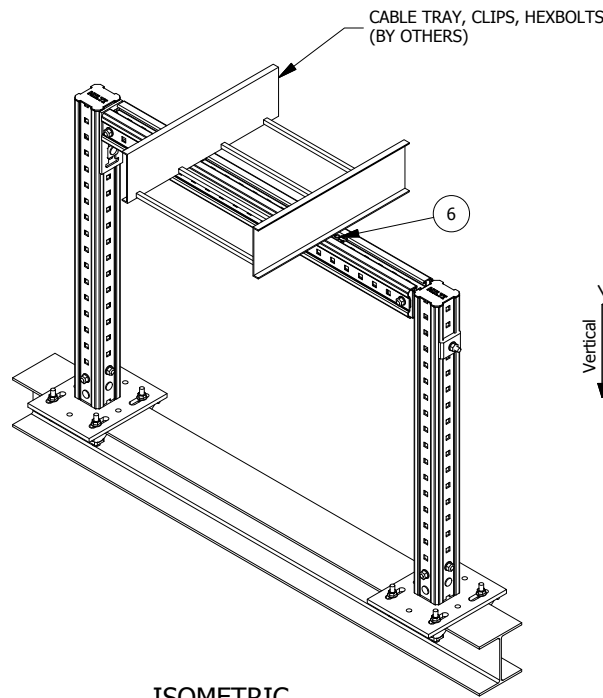
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C

D

E

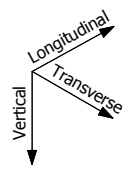
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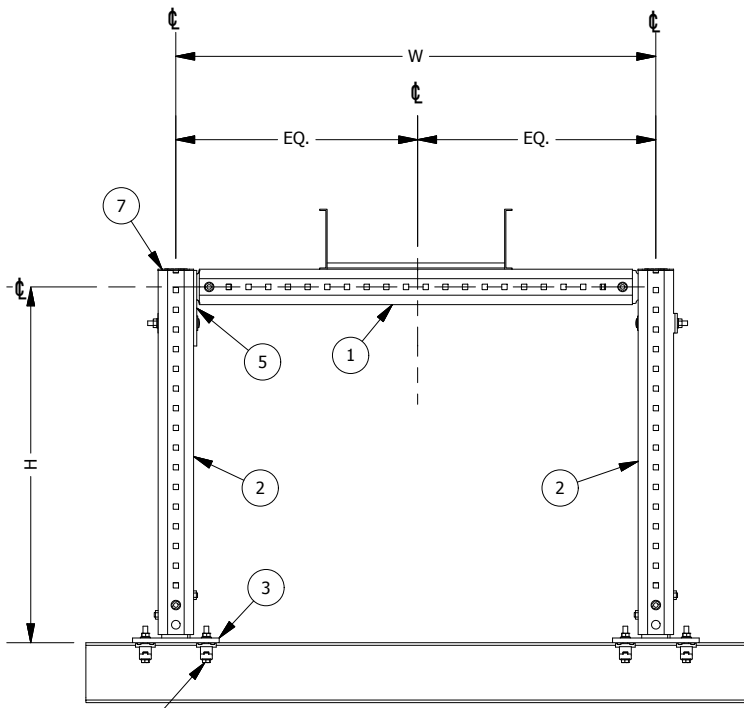
ISOMETRIC
(SCALE 5/8"=1'-0")

Piece Mark	Item No.*	Description	Qty.*
1	2119866	GIRDER MIQ-90	1
2	304798	GIRDER MI-90	2
3	VARIES	CONNECTOR MIC-S90-XH STEEL - SEE TABLE	2
4	387398	BEAM CLAMP MI-SGC-M16	8
5	2140257	CONNECTOR MIQC-90-MI	2
6	2183584	MIQM 3/8" WING NUT	2
7	432077	END CAP - MIA-EC-90	2

MIC-S90-XH BEAM WIDTH TABLE		
X	Beam Width	Item No.
A	3 to 6.5	2174665
B	6.5 to 9.3	2174666
C	9.2 to 12.0	2174667



LRFD, lbs	Max W, in	48
	Max H, in	48
	Vertical	3500
ASD, lbs	Transverse	250
	Longitudinal	500
	Vertical	2000
ASD, lbs	Transverse	180
	Longitudinal	300



ELEVATION
(SCALE 5/8"=1'-0")

NOTE(S):

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REVISION HISTORY		
NO:	DESCRIPTION:	DATE:
A	NOT FOR CONSTRUCTION	10/06/2017

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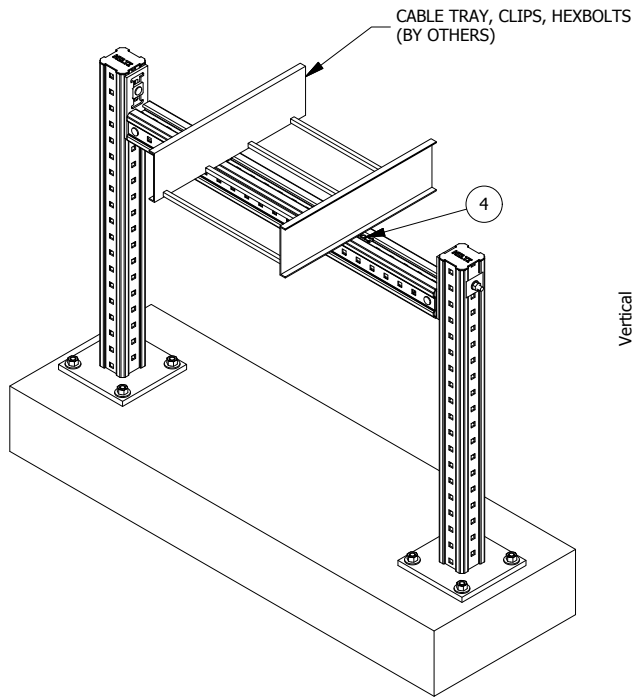
PROJECT NAME:
**TYPICAL DETAILS
TD-CT-GP110-S**

PROJECT DESCRIPTION:
CABLE TRAY GOALPOST STEEL

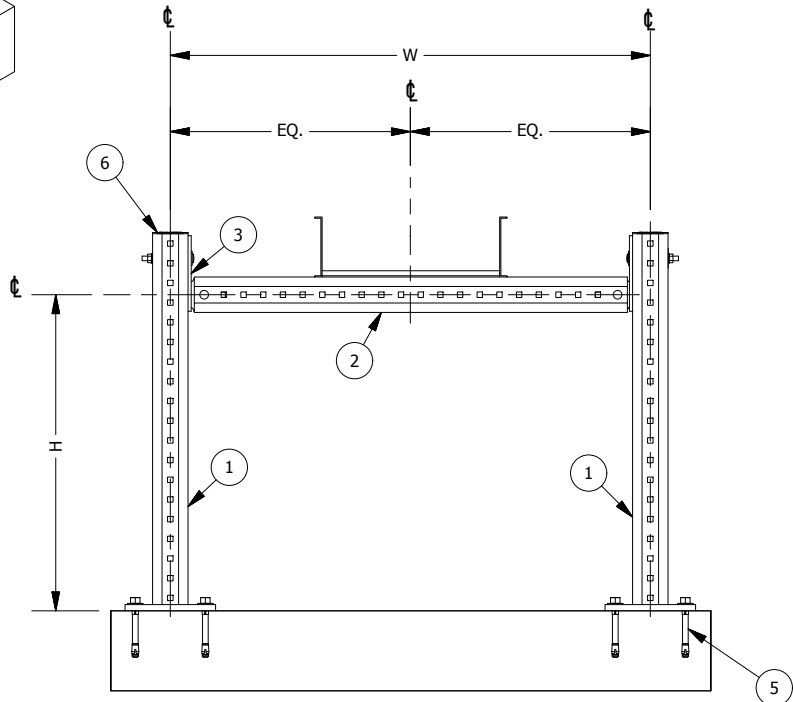
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GAB	IDP	OMO	JWP
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ANSI A		PROJECT 10017	JOB CT
		SHEET 1	

1 2 3 4 5 6

Piece Mark	Item No.*	Description	Qty.*
1	2174682	MIC-C90-DH WELDED BRACKET	2
2	2119866	GIRDER MIQ-90	1
3	2140257	CONNECTOR MIQC-90-MI	2
4	2183584	MIQM 3/8" WING NUT	2
5	VARIES	USE APPROPRIATE HILTI ANCHOR	8
6	432077	END CAP - MIA-EC-90	2



ISOMETRIC
(SCALE 5/8"=1'-0")



ELEVATION
(SCALE 5/8"=1'-0")

LRFD, lbs	Max W, in	72
	Max H, in	48
	Vertical	2800
ASD, lbs	Transverse	240
	Longitudinal	600
	Vertical	2400
	Transverse	220
	Longitudinal	220

NOTE(S):

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- ANCHOR CAPACITIES NOT CONSIDERED.

REVISION HISTORY

NO:	DESCRIPTION:	DATE:
A	NOT FOR CONSTRUCTION	10/06/2017

PROJECT NAME:

**TYPICAL DETAILS
TD-CT-GP111-C**

PROJECT DESCRIPTION:

CABLE TRAY GOALPOST CONCRETE

HILTI

DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
GAB	BAP	OMO	JWP

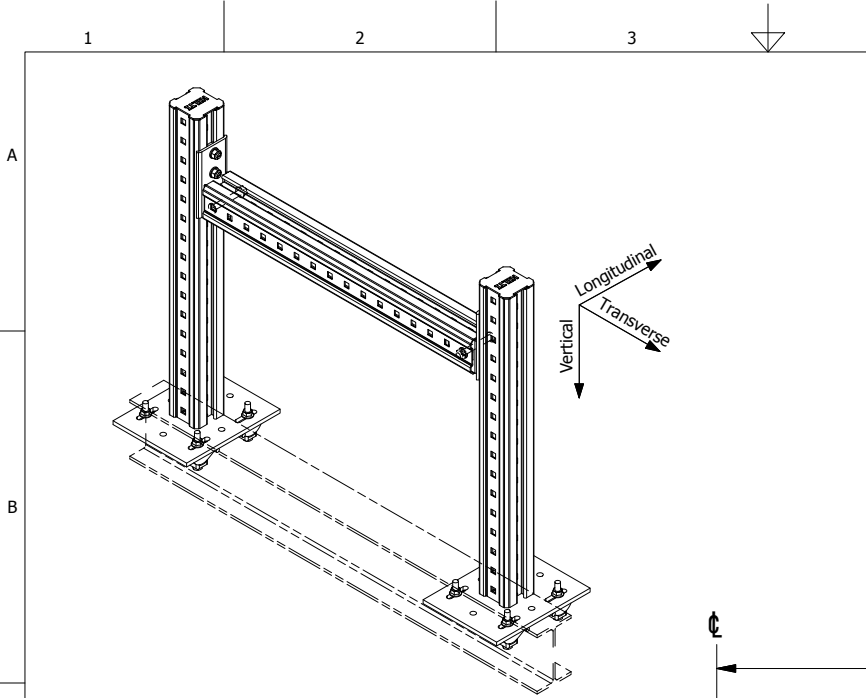
PAPER SIZE:

ANSI A

PROJECT NUMBER:

PROJECT: 10017 - JOB: CT - SHEET: 1

All loading and design criteria supplied by customer is assumed accurate. Only the stated Design Assumptions were considered, and must be verified by the responsible Engineer of Record (EOR). The basis of Hilti component and connection design is the published data in the current Hilti Technical Guide, including material and cross-section properties, allowable load values, factors of safety, methods of calculation, and limiting factors. The EOR must verify suitability for any specific application, and the capacity of the supportive structure to receive the shown configuration and associated reaction loads. Modification to components and/or design may alter performance and must be evaluated by the EOR.

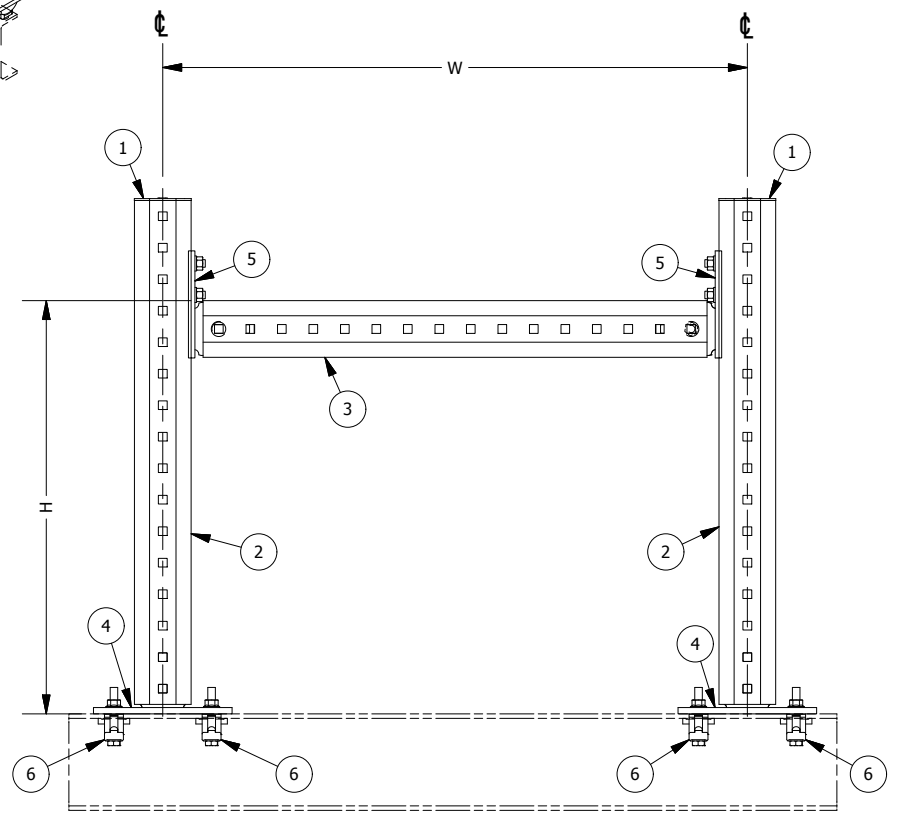


Piece Mark	Item No.*	Description	Qty.*
1	432077	END CAP - MIA-EC-90	2
2	2119866	GIRDER MIQ-90	2
3	2119866	GIRDER MIQ-90	1
4	VARIES	CONNECTOR MIQC-S90-XP - SEE TABLE	2
5	2123881	MIQC-90-HT	2
6	233859	Beam clamp MI-SGC M12	8

X	BEAM WIDTH	ITEM No.
A	3 - 6.5	2120271
B	6.5 - 9.3	2120273
C	9.3 - 12	2120275

ISOMETRIC
(SCALE 3/4"=1'-0")

LRFD, lbs	Max W, in	48
	Max H, in	48
	Vertical	3200
	Transverse	200
ASD, lbs	Vertical	2300
	Transverse	240
	Longitudinal	200
	Longitudinal	120



ELEVATION
(SCALE 1"=1'-0")

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REVISION HISTORY		
NO:	DESCRIPTION:	DATE:
A	NOT FOR CONSTRUCTION	10/06/2017

PROJECT NAME:
**TYPICAL DETAILS
TD-CT-GP111-S**

PROJECT DESCRIPTION:
TYPICALS

All loading and design criteria supplied by customer is assumed accurate. Only the stated Design Assumptions were considered, and must be verified by the responsible Engineer of Record (EOR). The basis of Hilti component and connection design is the published data in the current Hilti Technical Guide, including material and cross-section properties, allowable load values, factors of safety, methods of calculation, and limiting factors. The EOR must verify suitability for any specific application, and the capacity of the supportive structure to receive the shown configuration and associated reaction loads. Modification to components and/or design may alter performance and must be evaluated by the EOR.

HILTI

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A

B

C

D

E

F

A

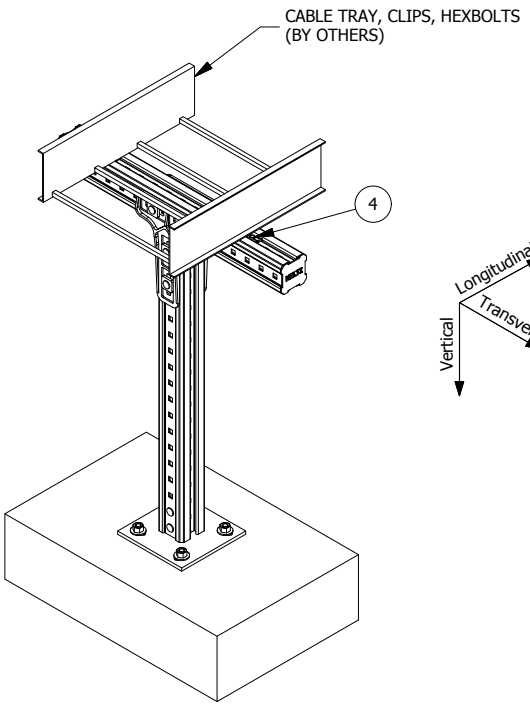
B

C

D

E

F

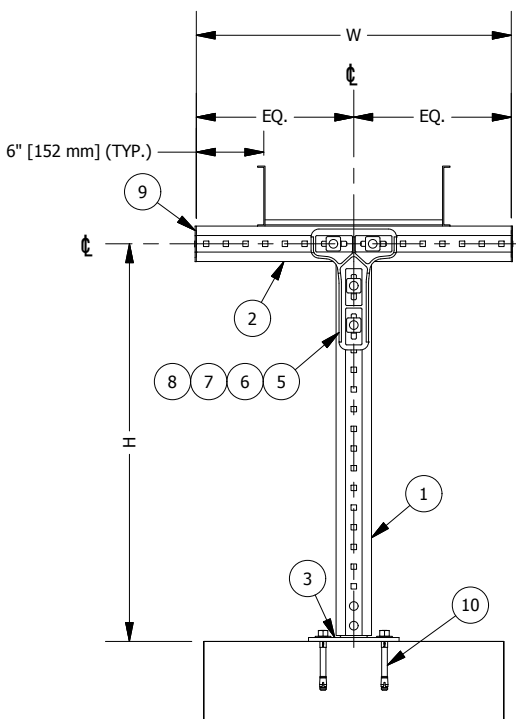


ISOMETRIC
(SCALE 5/8"=1'-0")

	Max W, in	36
	Max H, in	48
LRFD, lbs	Vertical	1600
	Transverse	200
	Longitudinal	100
ASD, lbs	Vertical	1200
	Transverse	120
	Longitudinal	70

Vertical

Longitudinal
Transverse



ELEVATION
(SCALE 5/8"=1'-0")

Piece Mark	Item No.*	Description	Qty.*
1	2119866	GIRDER MIQ-90	1
2	2119866	GIRDER MIQ-90	1
3	2120144	MIQC-C90 BASE PLATE	1
4	2183584	MIQM 3/8" WING NUT	2
5	2048107	CONNECTOR MIC-90-LH	1
6	304887	EASYHAND SCREW MIA-EH90	4
7	305707	TOOTHED PLATE MIA-TP	4
8	382897	PREVAIL TORQUE HEX HEAD NUT M12-F-SL-WS 3/4"	4
9	432077	END CAP - MIA-EC-90	2
10	VARIES	USE APPROPRIATE HILTI ANCHOR	4

NOTE(S):

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REVISION HISTORY		
NO:	DESCRIPTION:	DATE:
A	NOT FOR CONSTRUCTION	10/06/2017

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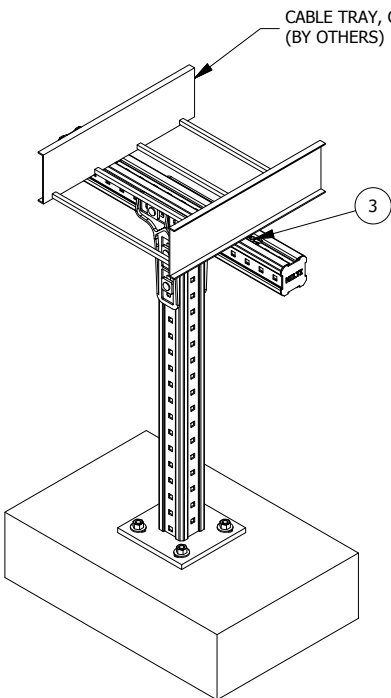
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**TYPICAL DETAILS
TD-CT-TP111-C**

PROJECT DESCRIPTION:
CABLE TRAY T-POST CONCRETE

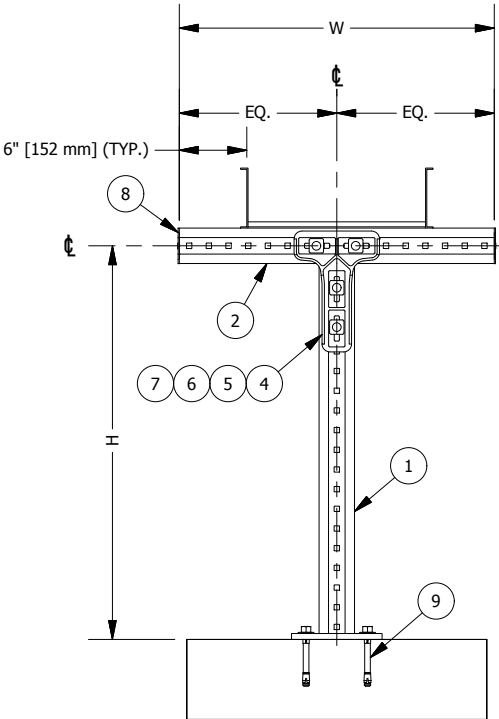
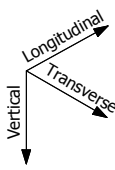
HILTI

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PAPER SIZE:		PROJECT NUMBER:	
ANSI A		PROJECT 10017	JOB CT
		SHEET 1	

Piece Mark	Item No.*	Description	Qty.*
1	2174682	BRACKET MIC-C90-DH-2000	1
2	2119866	GIRDER MIQ-90	1
3	2183584	MIQM 3/8" WING NUT	2
4	2048107	CONNECTOR MIC-90-LH	1
5	304887	EASYHAND SCREW MIA-EH90	4
6	305707	TOOTHED PLATE MIA-TP	4
7	382897	PREVAIL TORQUE HEX HEAD NUT M12-F-SL-WS 3/4"	4
8	432077	END CAP - MIA-EC-90	2
9	VARIES	USE APPROPRIATE HILTI ANCHOR	4



ISOMETRIC
(SCALE 5/8"=1'-0")



ELEVATION
(SCALE 5/8"=1'-0")

LRFD, lbs	Max W, in	36
	Max H, in	48
	Vertical	4000
	Transverse	700
ASD, lbs	Longitudinal	750
	Vertical	4000
	Transverse	400
	Longitudinal	420

NOTE(S):

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- ANCHOR CAPACITIES NOT CONSIDERED.

REVISION HISTORY		
NO:	DESCRIPTION:	DATE:
A	NOT FOR CONSTRUCTION	10/06/2017

PROJECT NAME:
**TYPICAL DETAILS
TD-CT-TP112-C**

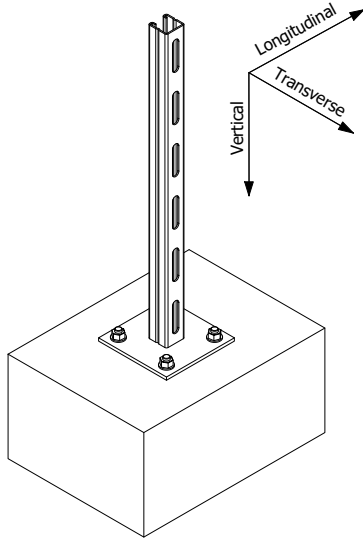
PROJECT DESCRIPTION:
CABLE TRAY T-POST CONCRETE

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PAPER SIZE:		PROJECT NUMBER:	
ANSI A		PROJECT 10017	JOB CT
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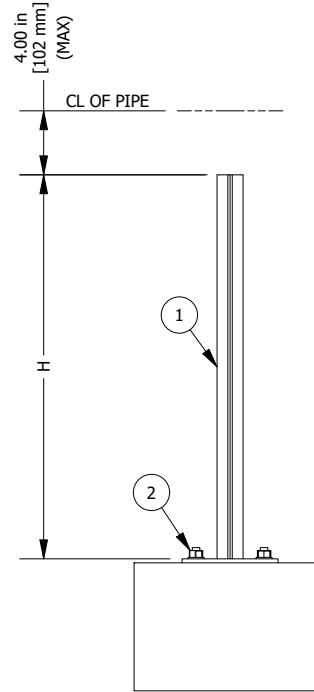
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Piece Mark	Item No.*	Description	Qty.*
1	VARIES	MQK-158/4-F-XX (SEE TABLE A)	1
2	387527	KB-TZ SS304 1/2 X 4 1/2 (SEE NOTE G)	4

TABLE A	
MQK-158/4-F-XX ITEM NO.	MQK-158/4-F-XX DESCRIPTION
2248531	MQK-158/4-F-24
2248530	MQK-158/4-F-36
2248532	MQK-158/4-F-48



ISOMETRIC
(SCALE 1"=1'-0")



ELEVATION
(SCALE 1"=1'-0")

ALLOWABLE LOADS, lbs	Max H, in	24	36	48
	Vertical	425	300	250
	Transverse	127	90	75
	Longitudinal	127	90	75

NOTE(S):

- A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS INSTALL SOFTWARE VERSION 2.23. THE ENGINEER OF RECORD SHALL EVALUATE THIS TYPICAL SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- B. THE EVALUATION OF EXISTING STRUCTURE IS OUTSIDE OF THE TYPICAL DESIGN SCOPE AND SHALL BE PERFORMED BY THE ENGINEER OF RECORD.
- C. TYPICAL SUPPORT DESIGN IS BASED ON INTERNATIONAL BUILDING CODE (IBC) 2015. SEE TABLES IN DETAILS FOR ALLOWABLE DESIGN LOADS (STATIC U.N.O.); LATERAL LOADS CALCULATED AS 30% OF DEAD LOAD.
- D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
- E. MAXIMUM ALLOWABLE LOAD TABLE SHOWN IN THE TYPICAL DETAILS ARE BASED ON THE COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCURS SIMULTANEOUSLY.
- F. REFER TO COMPONENT MANUFACTURER'S FOR REQUIRED INSTALLATION INFORMATION.
- G. MIN. CONCRETE COMPRESSIVE STRENGTH $f'_c=3000$ PSI, MIN. CONCRETE EDGE DISTANCE = 4.0 INCHES, MIN. EFFECTIVE EMBEDMENT $h_{eff} = 2.0$ INCHES.
- H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR REACTIONS AT BASE PLATE DUE TO VERTICAL DEAD LOAD.

REVISION HISTORY

DATE:	COMMENT:
07/28/2020	ISSUE FOR USE

TYPICAL DETAIL NAME:

**TYPICAL DETAILS
TD-P-PS05-C**

TYPICAL DETAIL DESCRIPTION:

MQK-158/4-F STANCHION CONCRETE

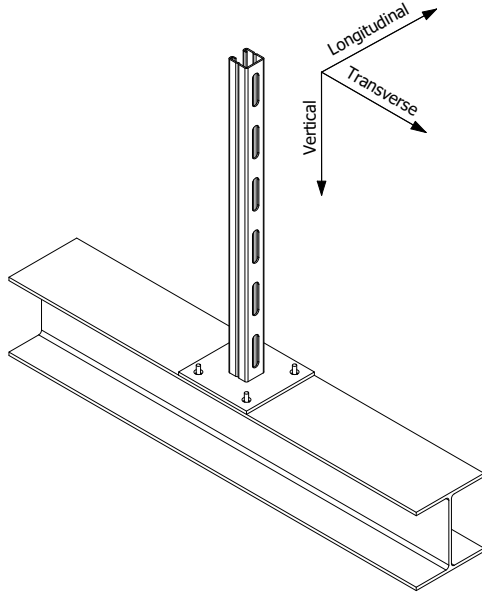


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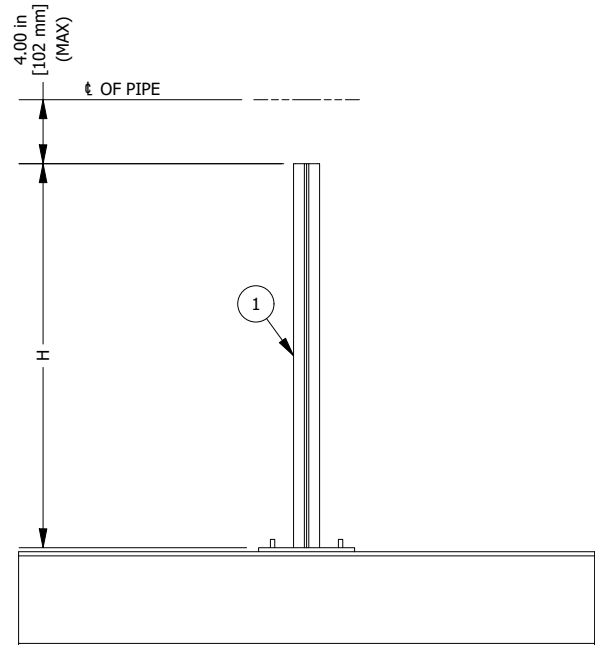
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Piece Mark	Item No.*	Description	Qty.*
1	VARIES	MQK-158/4-F-XX (SEE TABLE A)	1
2	2194340	THREADED STUD X-BT-M10/15 SN 8 (SEE NOTE G)	4

TABLE A	
MQK-158/4-F-XX ITEM NO.	MQK-158/4-F-XX DESCRIPTION
2248531	MQK-158/4-F-24
2248530	MQK-158/4-F-36
2248532	MQK-158/4-F-48



ISOMETRIC
(SCALE 1"=1'-0")



ELEVATION
(SCALE 1"=1'-0")

ALLOWABLE LOADS, lbs	Max H, in	24	36	48
	Vertical	425	300	250
	Transverse	127	90	75
	Longitudinal	127	90	75

NOTE(S):

- A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS INSTALL SOFTWARE VERSION 2.23. SEE ALLOWABLE LOAD TABLE FOR MAXIMUM ALLOWABLE LOAD AND DIMENSION. THE ENGINEER OF RECORD SHALL EVALUATE THIS TYPICAL SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
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- D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
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- F. REFER TO COMPONENT MANUFACTURER'S FOR REQUIRED INSTALLATION INFORMATION.
- G. MIN. STEEL BASE THICKNESS SHALL BE 5/16 INCH. MIN EDGE DISTANCE SHALL BE 3/8 INCH. MIN YIELD STRENGTH OF STEEL SHALL BE $F_y=36KSI$

REVISION HISTORY

DATE:	COMMENT:
07/28/2020	ISSUE FOR USE

TYPICAL DETAIL NAME:

**TYPICAL DETAILS
TD-P-PS06-S**

TYPICAL DETAIL DESCRIPTION:

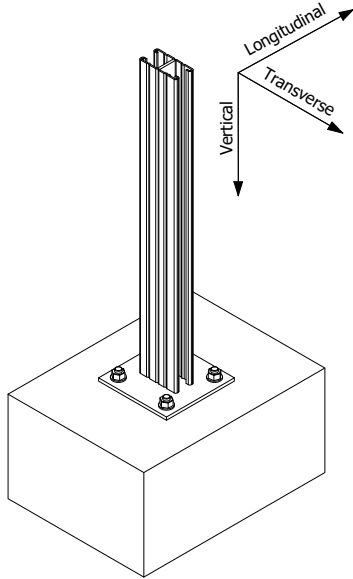
MQK-158/4-F STANCHION STEEL

HILTI			
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PAPER SIZE:	TYPICAL DETAIL NUMBER:		
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	TD-P-PS06-S	-	1

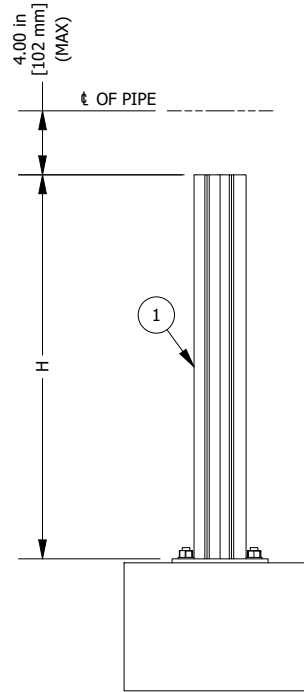
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Piece Mark	Item No.*	Description	Qty.*
1	VARIES	MQK-158/4-D-F-XX (SEE TABLE A)	1
2	387527	KB-TZ SS304 1/2 X 4 1/2 (SEE NOTE G)	4

TABLE A	
MQK-158/4-D-F-XX ITEM NO.	MQK-158/4-D-F-XX DESCRIPTION
2248533	MQK-158/4-D-F-24
2248534	MQK-158/4-D-F-36
2248535	MQK-158/4-D-F-48



ISOMETRIC
(SCALE 1"=1'-0")



ELEVATION
(SCALE 1"=1'-0")

ALLOWABLE LOADS, lbs	Max H, in	24	36	48
	Vertical	425	300	250
	Transverse	127	90	75
	Longitudinal	127	90	75

NOTE(S):

- A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS INSTALL SOFTWARE VERSION 2.23. THE ENGINEER OF RECORD SHALL EVALUATE THIS TYPICAL SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- B. THE EVALUATION OF EXISTING STRUCTURE IS OUTSIDE OF THE TYPICAL DESIGN SCOPE AND SHALL BE PERFORMED BY THE ENGINEER OF RECORD.
- C. TYPICAL SUPPORT DESIGN IS BASED ON INTERNATIONAL BUILDING CODE (IBC) 2015. SEE TABLES IN DETAILS FOR ALLOWABLE DESIGN LOADS (STATIC U.N.O.); LATERAL LOADS CALCULATED AS 30% OF DEAD LOAD.
- D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
- E. MAXIMUM ALLOWABLE LOAD TABLE SHOWN IN THE TYPICAL DETAILS ARE BASED ON THE COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCURS SIMULTANEOUSLY.
- F. REFER TO COMPONENT MANUFACTURER'S FOR REQUIRED INSTALLATION INFORMATION.
- G. MIN. CONCRETE COMPRESSIVE STRENGTH $F'_C=3000$ PSI, MIN. CONCRETE EDGE DISTANCE = 4.0 INCHES, MIN. EFFECTIVE EMBEDMENT $H_{eff} = 2.0$ INCHES.
- H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. EOR TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.

REVISION HISTORY

DATE:	COMMENT:
07/28/2020	ISSUE FOR USE

TYPICAL DETAIL NAME:

**TYPICAL DETAILS
TD-P-PS07-C**

TYPICAL DETAIL DESCRIPTION:

MQK-158/4-D-F STANCHION CONCRETE



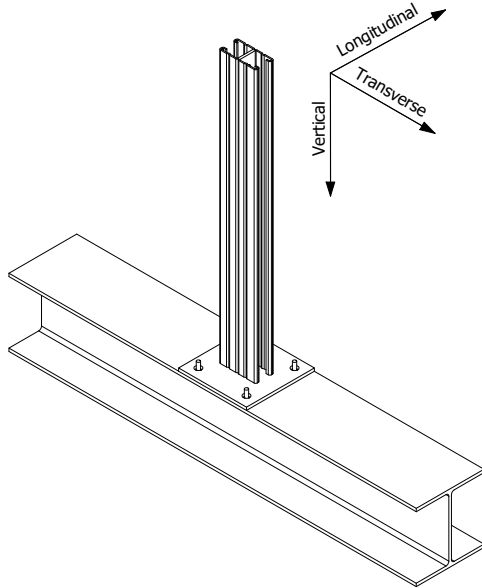
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ANSI A	TD-P-PS07-C	1

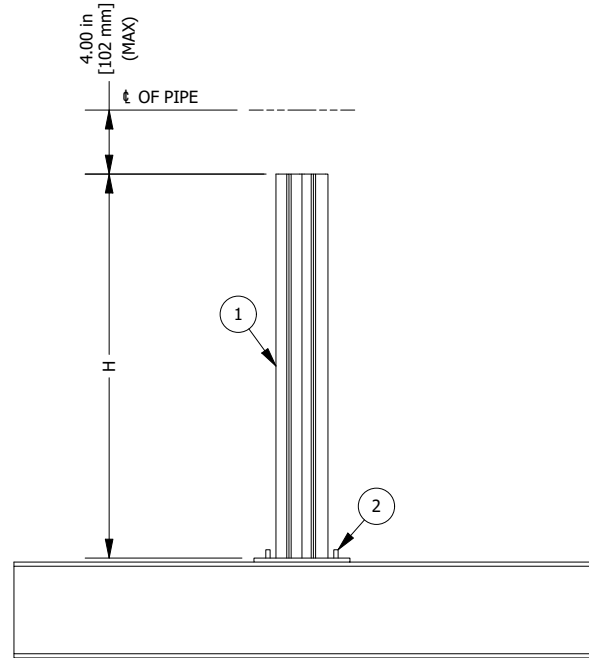
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Piece Mark	Item No.*	Description	Qty.*
1	VARIES	MQK-158/4-D-F-XX (SEE TABLE A)	1
2	2194340	THREADED STUD X-BT-M10/15 SN 8 (SEE NOTE G)	4

TABLE A	
MQK-158/4-D-F-XX ITEM NO.	MQK-158/4-D-F-XX DESCRIPTION
2248533	MQK-158/4-D-F-24
2248534	MQK-158/4-D-F-36
2248535	MQK-158/4-D-F-48



ISOMETRIC
(SCALE 1"=1'-0")



ELEVATION
(SCALE 1"=1'-0")

ALLOWABLE LOADS, lbs	Max H, in	24	36	48
	Vertical	425	300	250
	Transverse	127	90	75
	Longitudinal	127	90	75

NOTE(S):

- A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS INSTALL SOFTWARE VERSION 2.23. SEE ALLOWABLE LOAD TABLE FOR MAXIMUM ALLOWABLE LOAD AND DIMENSION. THE ENGINEER OF RECORD SHALL EVALUATE THIS TYPICAL SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- B. THE EVALUATION OF EXISTING STRUCTURE IS OUTSIDE OF THE TYPICAL DESIGN SCOPE AND SHALL BE PERFORMED BY THE ENGINEER OF RECORD.
- C. TYPICAL SUPPORT DESIGN IS BASED ON INTERNATIONAL BUILDING CODE (IBC) 2015. SEE TABLES IN DETAILS FOR ALLOWABLE DESIGN LOADS (STATIC U.N.O.) C. LATERAL LOADS CALCULATED AT 30% OF DEAD LOAD.
- D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
- E. MAXIMUM ALLOWABLE LOAD TABLE SHOWN IN THE TYPICAL DETAILS ARE BASED ON THE COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCURS SIMULTANEOUSLY.
- F. REFER TO COMPONENT MANUFACTURER'S IFU'S FOR REQUIRED INSTALLATION INFORMATION.
- G. MIN. STEEL BASE THICKNESS SHALL BE 5/16 INCH. MIN EDGE DISTANCE SHALL BE 3/8 INCH. MIN YIELD STRENGTH OF STEEL SHALL BE $F_y=36\text{KSI}$

REVISION HISTORY

DATE:	COMMENT:
07/28/2020	ISSUE FOR USE

TYPICAL DETAIL NAME:

**TYPICAL DETAILS
TD-P-PS08-S**

TYPICAL DETAIL DESCRIPTION:

MQK-158/D-F STANCHION STEEL

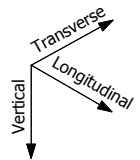
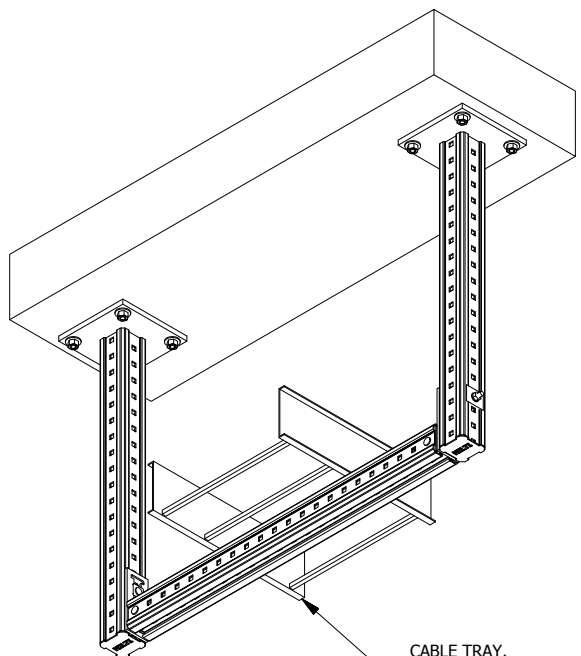


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PAPER SIZE:	TYPICAL DETAIL NUMBER:	
	DETAIL	SHEET
ANSI A	TD-P-PS08-S	1

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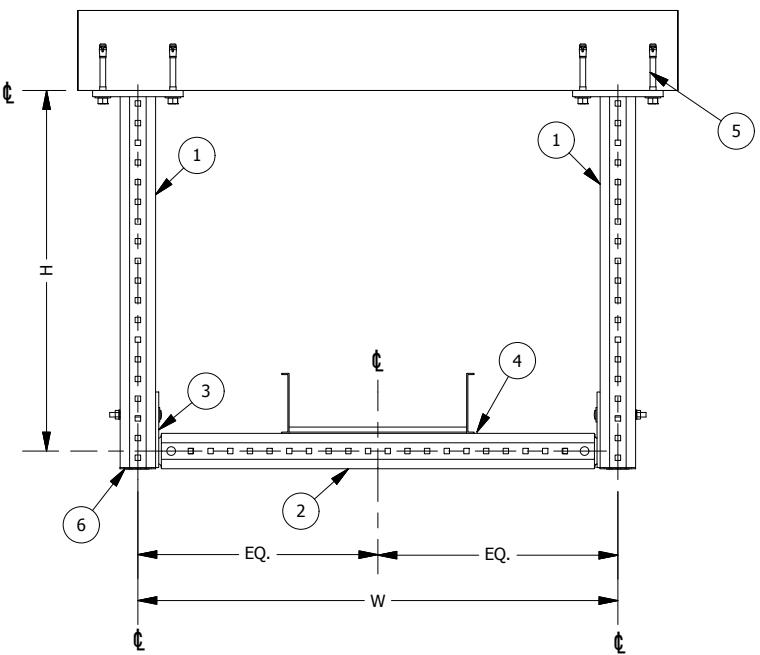
Piece Mark	Item No.*	Description	Qty.*
1	2174682	MIC-C90-DH WELDED BRACKET	2
2	2119866	GIRDER MIQ-90	1
3	2140257	CONNECTOR MIQC-90-MI	2
4	2183584	MIQM 3/8" WING NUT	2
5	VARIES	USE APPROPRIATE HILTI ANCHOR	8
6	432077	END CAP - MIA-EC-90	2



CABLE TRAY, CLIPS, HEXBOLTS (BY OTHERS)

ISOMETRIC
(SCALE 5/8"=1'-0")

LRFD, lbs	Max W, in	48
	Max H, in	36
	Vertical	2800
ASD, lbs	Transverse	250
	Longitudinal	400
	Vertical	1900
	Transverse	160
	Longitudinal	440



ELEVATION
(SCALE 5/8"=1'-0")

NOTE(S):

- THIS DRAWING REPRESENTS A COMMON CONFIGURATION FOR THIS APPLICATION. THE CABLE TRAY (CT) SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON HILTI -PUBLISHED STATIC LOAD DATA AND DESIGN METHODOLOGIES, AND GENERIC, NON-PROJECT SPECIFIC DESIGN ASSUMPTIONS. THE ENGINEERING OF RECORD SHALL EVALUATE THIS SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL, PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.
- ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRIC LOADS INCLUDED. CT CONNECTION HARDWARE MUST BE CHECKED SEPARATELY.
- DESIGN ASSUMPTIONS: IBC 2012 BUILDING CODE; SEE TABLE FOR DESIGN LOADS (STATIC U.N.O.)
- REFER TO COMPONENT MANUFACTURER'S IFU'S FOR REQUIRED INSTALLATION INFORMATION.
- FOR APPLICABLE CONCRETE OR STEEL ANCHOR DESIGN CONTACT HILTI OR THE PROJECT SITE ENGINEER OF RECORD.
- CAPACITIES SHOWN ABOVE ARE BASED ON VERTICAL COMBINED WITH TRANSVERSE AND VERTICAL COMBINED WITH LONGITUDINAL. A SEPERATE ANALYSIS MUST BE PERFORMED IF VERTICAL, TRANSVERSE AND LONGITUDINAL LOADS OCCUR SIMULTANEOUSLY.
- ANCHOR CAPACITIES NOT CONSIDERED.

REVISION HISTORY		
NO:	DESCRIPTION:	DATE:
A	NOT FOR CONSTRUCTION	10/06/2017

PROJECT NAME:
TYPICAL DETAILS TD-CT-TR121-C

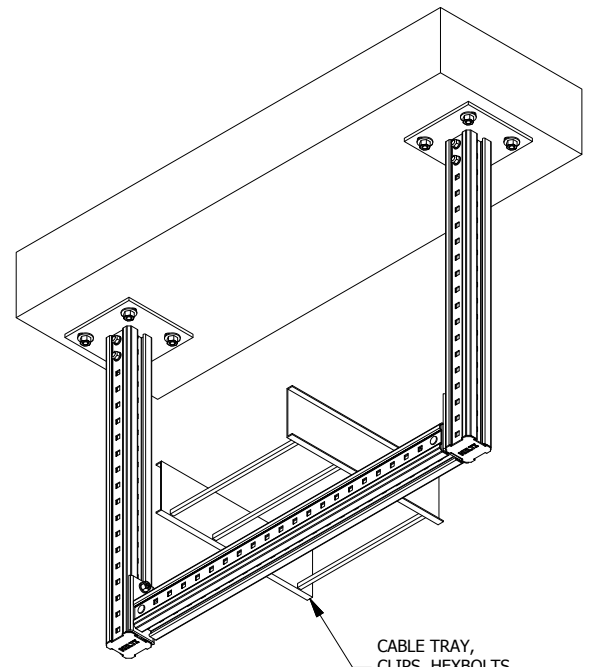
PROJECT DESCRIPTION:
CABLE TRAY TRAPEZE CONCRETE

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HILTI

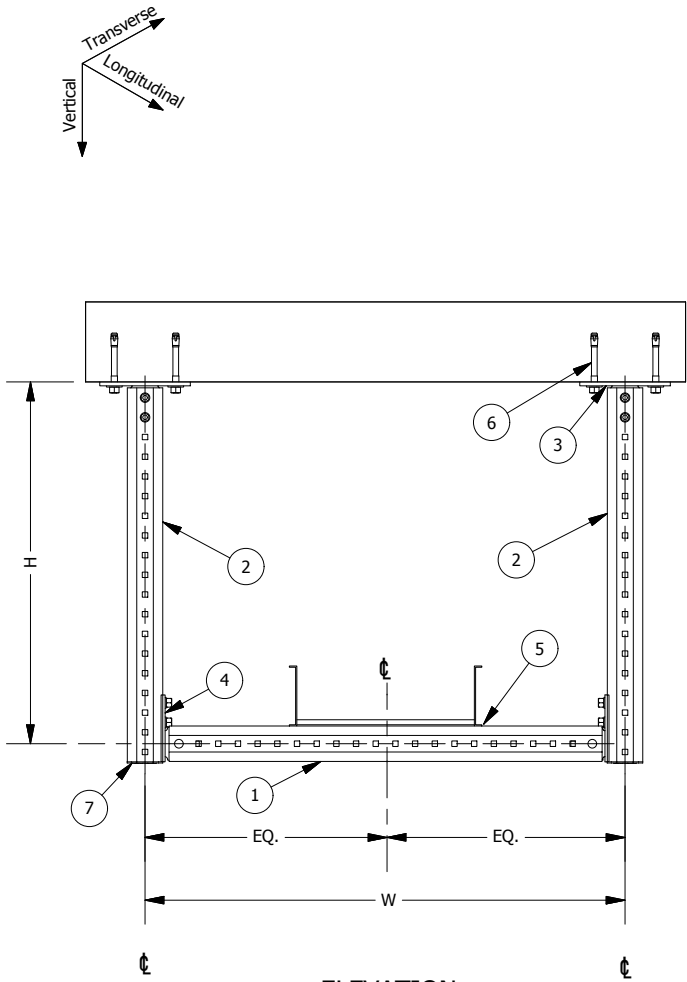
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GAB	IDP	OMO	JWP
PAPER SIZE:		PROJECT NUMBER:	
ANSI A	PROJECT 10017	JOB CT	SHEET 1

Piece Mark	Item No.*	Description	Qty.*
1	2119866	GIRDER MIQ-90	1
2	2119866	GIRDER MIQ-90	2
3	2120144	MIQC-C90 BASE PLATE	2
4	2123881	MIQC-90HT	2
5	2183584	MIQM 3/8" WING NUT	2
6	VARIABLES	USE APPROPRIATE HILTI ANCHOR	8
7	432077	END CAP - MIA-EC-90	2



ISOMETRIC
(SCALE 5/8"=1'-0")

	Max W, in	48
	Max H, in	36
LRFD, lbs	Vertical	2800
	Transverse	250
	Longitudinal	250
ASD, lbs	Vertical	2000
	Transverse	150
	Longitudinal	180



ELEVATION
(SCALE 5/8"=1'-0")

NOTE(S):

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- ANCHOR CAPACITIES NOT CONSIDERED.

REVISION HISTORY		
NO:	DESCRIPTION:	DATE:
A	NOT FOR CONSTRUCTION	10/06/2017

PROJECT NAME:
**TYPICAL DETAILS
TD-CT-TR122-C**

PROJECT DESCRIPTION:
CABLE TRAY TRAPEZE CONCRETE

HILTI

DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
GAB	IDP	OMO	JWP
PAPER SIZE:		PROJECT NUMBER:	
ANSI A		PROJECT 10017	JOB CT
		SHEET 1	

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