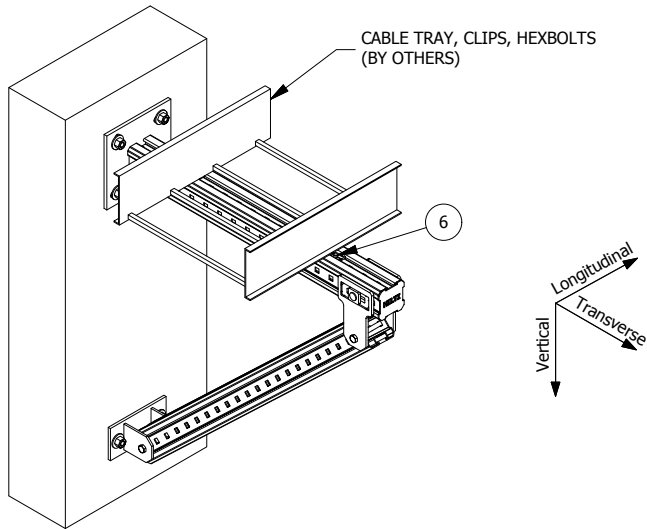
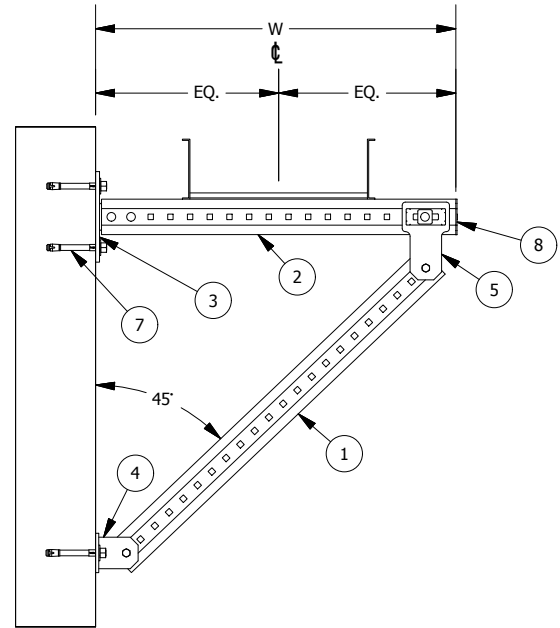


Piece Mark	Item No.*	Description	Qty.*
1	2119866	GIRDER MIQ-90	1
2	2119866	GIRDER MIQ-90	1
3	2120144	MIQC-C90 BASE PLATE	1
4	2174664	CONNECTOR MIC-CU-MAH CONCRETE	1
5	304806	CONNECTOR MIC-U-MA	1
6	2183584	MIQM 3/8" WING NUT	2
7	VARIES	USE APPROPRIATE HILTI ANCHOR	6
8	432077	END CAP - MIA-EC-90	1



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



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

	Max W, in	36
LRFD, lbs	Vertical	3000
	Transverse	1800
	Longitudinal	210
ASD, lbs	Vertical	1600
	Transverse	140
	Longitudinal	160

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-BC105-C**

PROJECT DESCRIPTION:

**CABLE TRAY BRACED CANTILEVER
CONCRETE**

HILTI

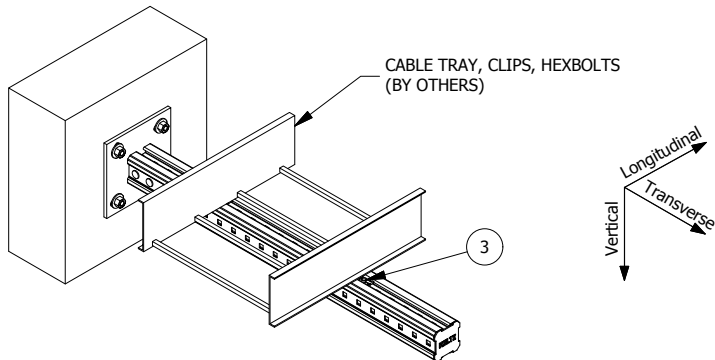
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GAB	IDP	OMO	JWP

PAPER SIZE: PROJECT NUMBER:

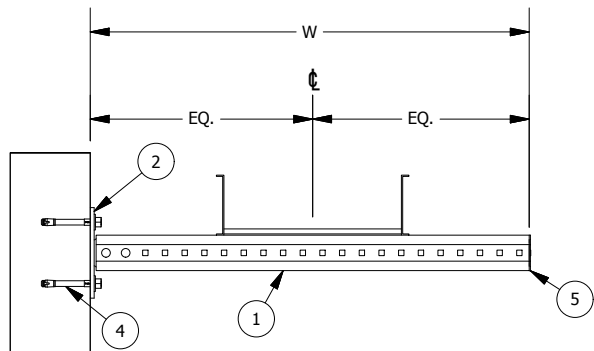
ANSI A	PROJECT	JOB	SHEET
	10017	CT	1

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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):

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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-C108-C**

PROJECT DESCRIPTION:

CABLE TRAY CANTILEVER CONCRETE

HILTI

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

PAPER SIZE:

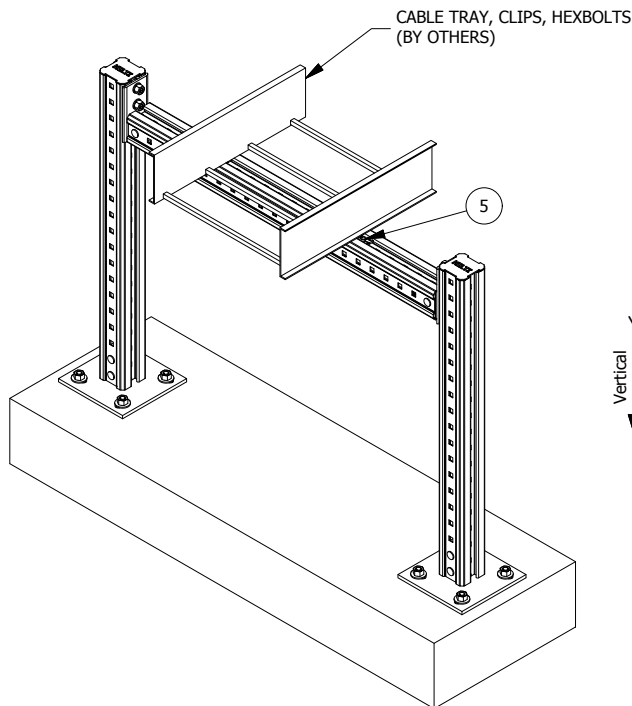
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PROJECT NUMBER:

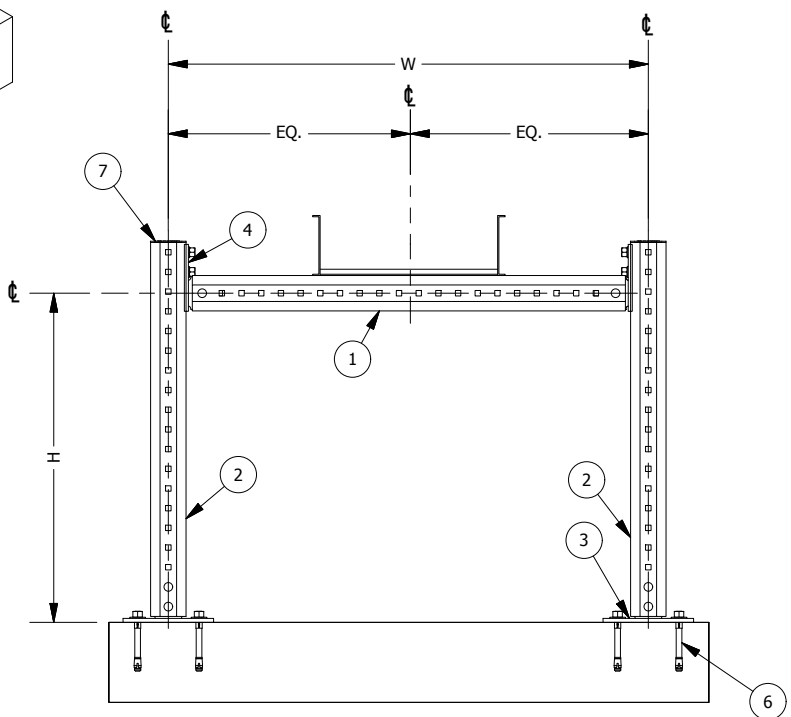
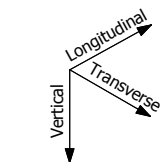
PROJECT 10017 - JOB CT - SHEET 1

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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):

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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-GP110-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.

1 2 3 4 5 6

A

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A

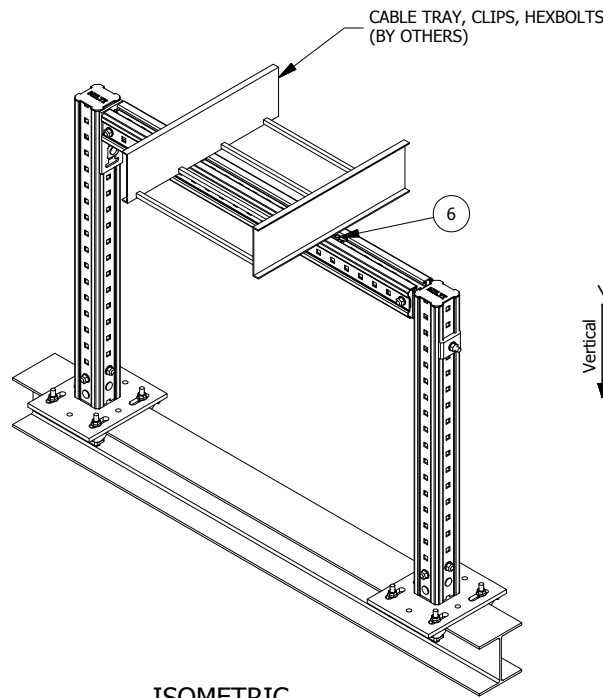
B

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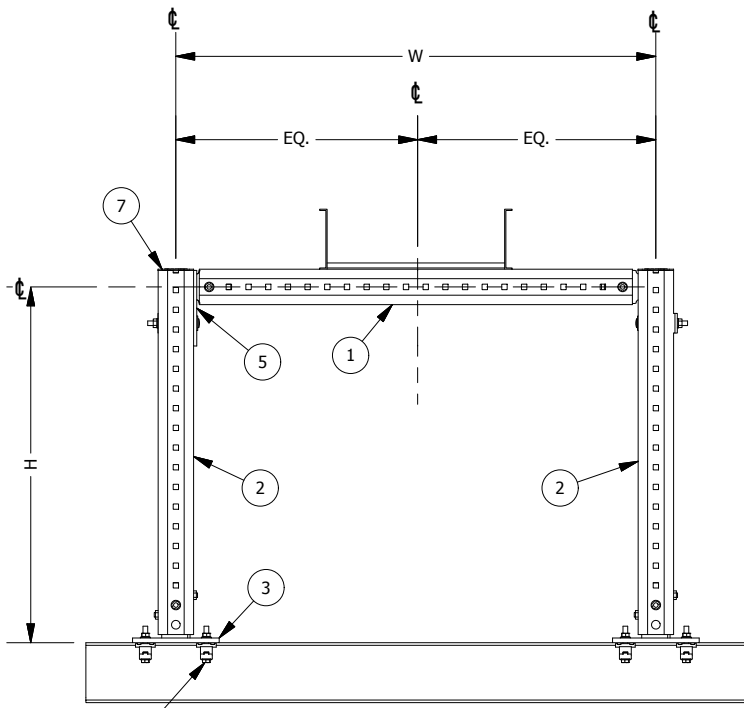


ISOMETRIC
(SCALE 5/8"=1'-0")

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

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
	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

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

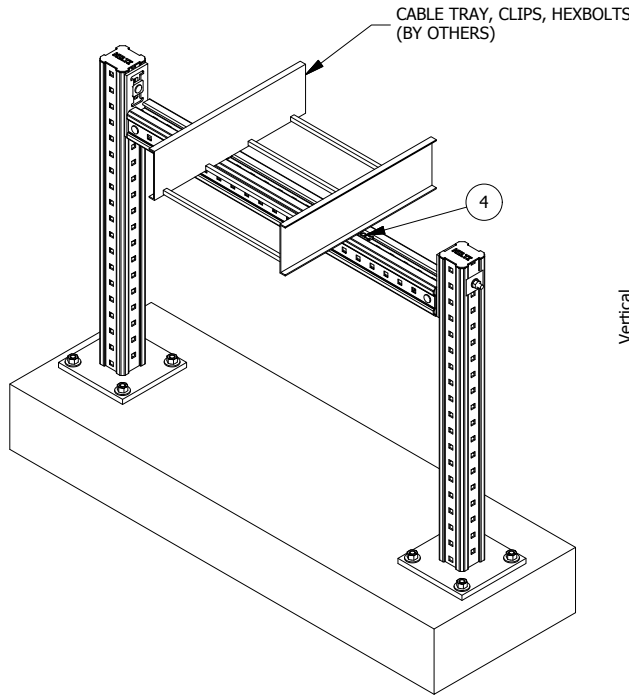
PROJECT DESCRIPTION:
CABLE TRAY GOALPOST STEEL

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.

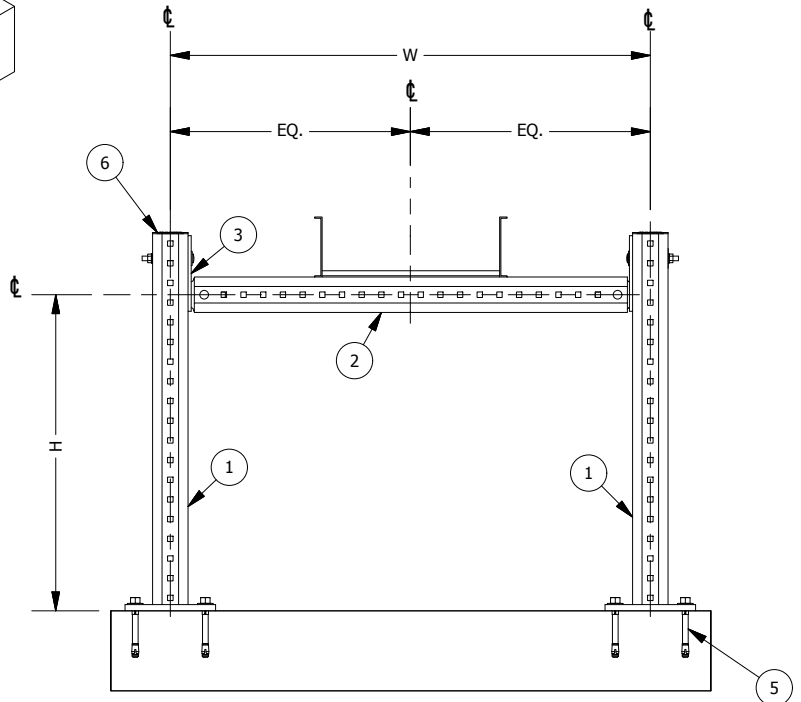
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DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
GAB	IDP	OMO	JWP
PAPER SIZE:	PROJECT NUMBER:		
ANSI A	PROJECT 10017	JOB CT	SHEET 1

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	VARIABLES	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

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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

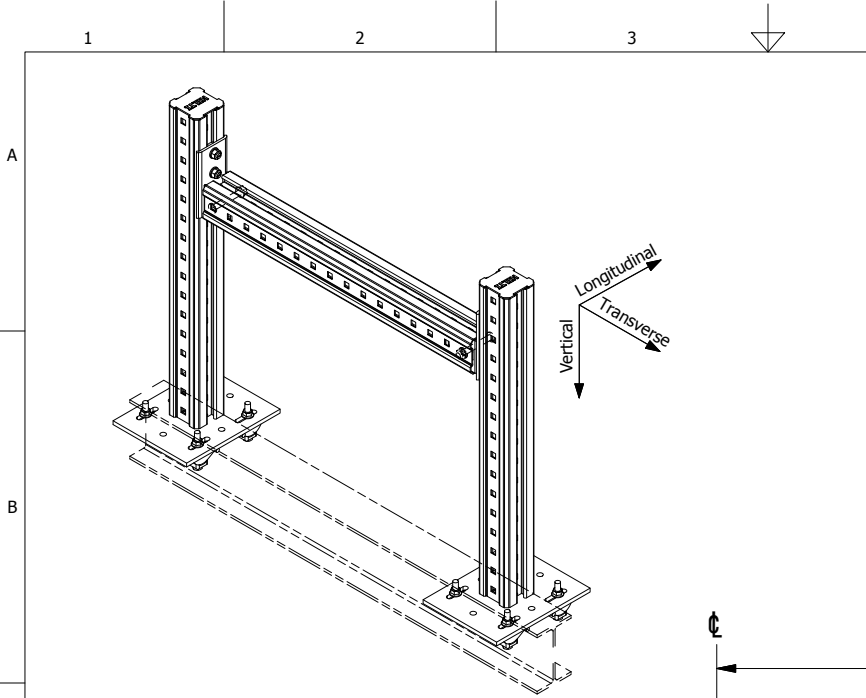
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PROJECT NUMBER:

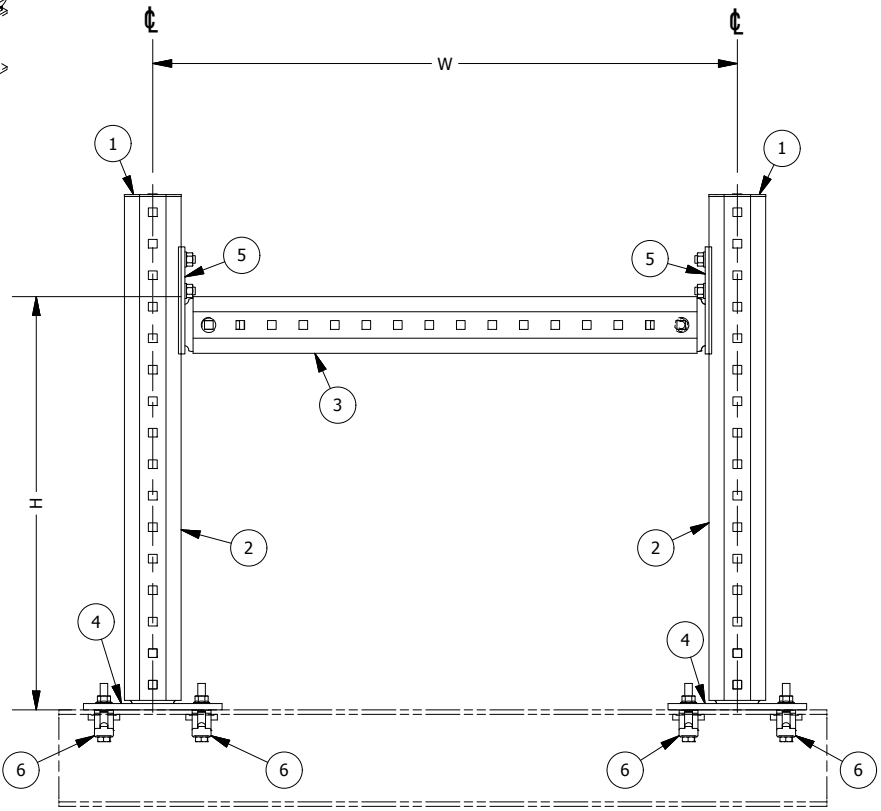
PROJECT 10017 - JOB CT - SHEET 1

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

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



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

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

MIQC-S90-XP BEAM WIDTH TABLE		
X	BEAM WIDTH	ITEM No.
A	3 - 6.5	2120271
B	6.5 - 9.3	2120273
C	9.3 - 12	2120275

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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

DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
BAP	BAP	AJM	INITIALS
PAPER SIZE:		PROJECT NUMBER:	
ANSI A	0000	00	1

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1 2 3 4 5 6

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A

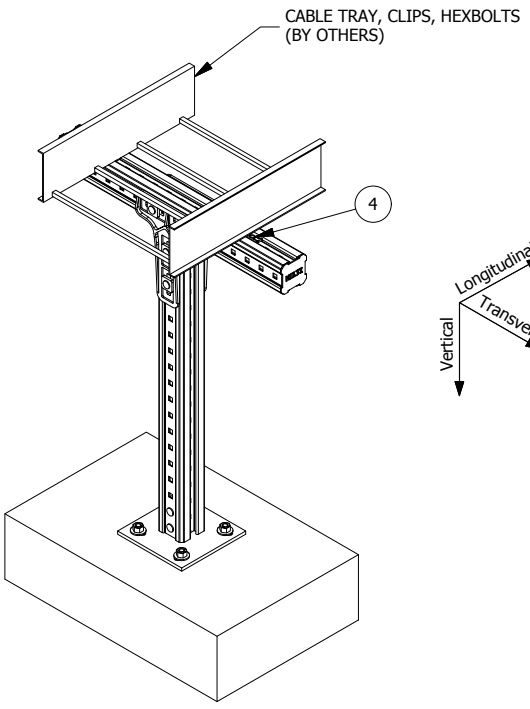
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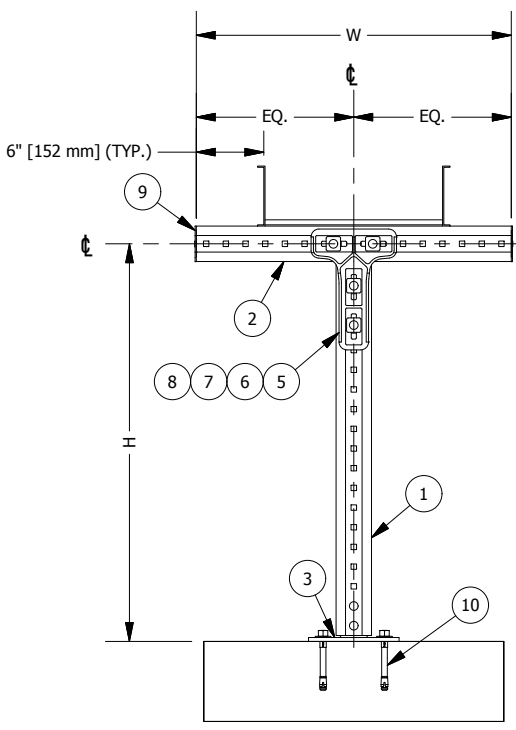
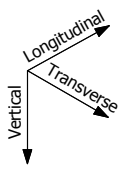
F



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

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



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

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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-TP111-C**

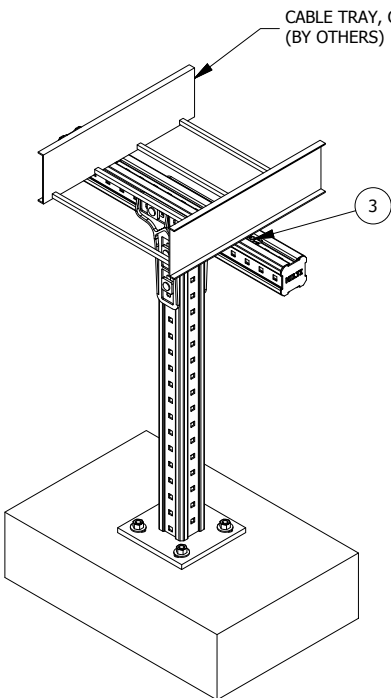
PROJECT DESCRIPTION:
CABLE TRAY T-POST CONCRETE

HILTI

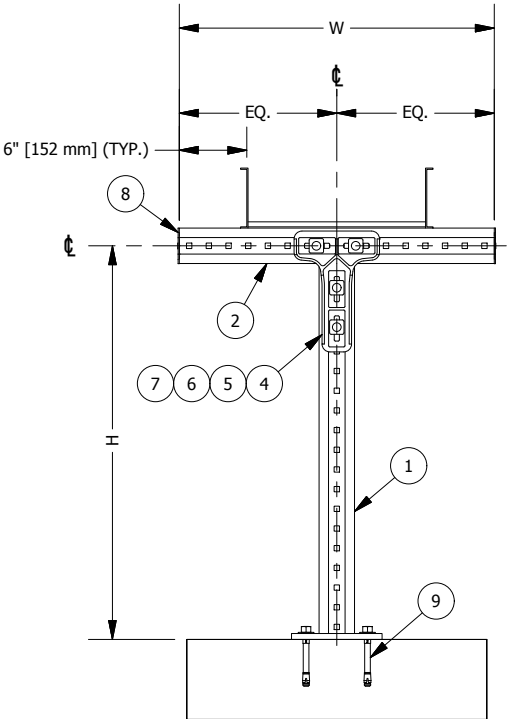
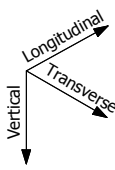
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GAB	BAP	OMO	JWP
PAPER SIZE:		PROJECT NUMBER:	
ANSI A	10017	CT	1

1 2 3 4 5 6

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")

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

NOTE(S):

1. 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.
2. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRIC LOADS INCLUDED. CT CONNECTION HARDWARE MUST BE CHECKED SEPARATELY.
3. DESIGN ASSUMPTIONS: IBC 2012 BUILDING CODE; SEE TABLE FOR DESIGN LOADS (STATIC U.N.O.)
4. REFER TO COMPONENT MANUFACTURER'S IFU'S FOR REQUIRED INSTALLATION INFORMATION.
5. FOR APPLICABLE CONCRETE OR STEEL ANCHOR DESIGN CONTACT HILTI OR THE PROJECT SITE ENGINEER OF RECORD.
6. 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.
7. ANCHOR CAPACITIES NOT CONSIDERED.

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

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

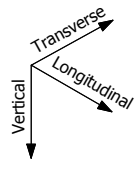
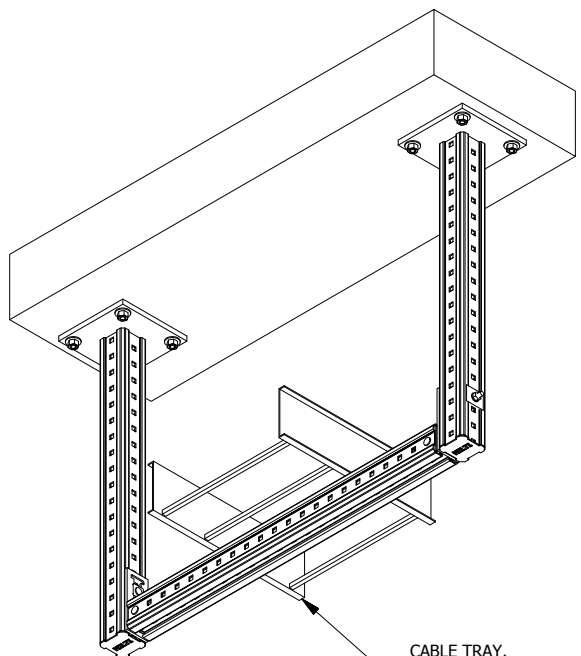


PROJECT DESCRIPTION:
CABLE TRAY T-POST CONCRETE

DRAWN:	CHECKED:	DESIGNED:	REVIEWED:
GAB	BAP	OMO	JWP
PAPER SIZE:	PROJECT NUMBER:		
ANSI A	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.

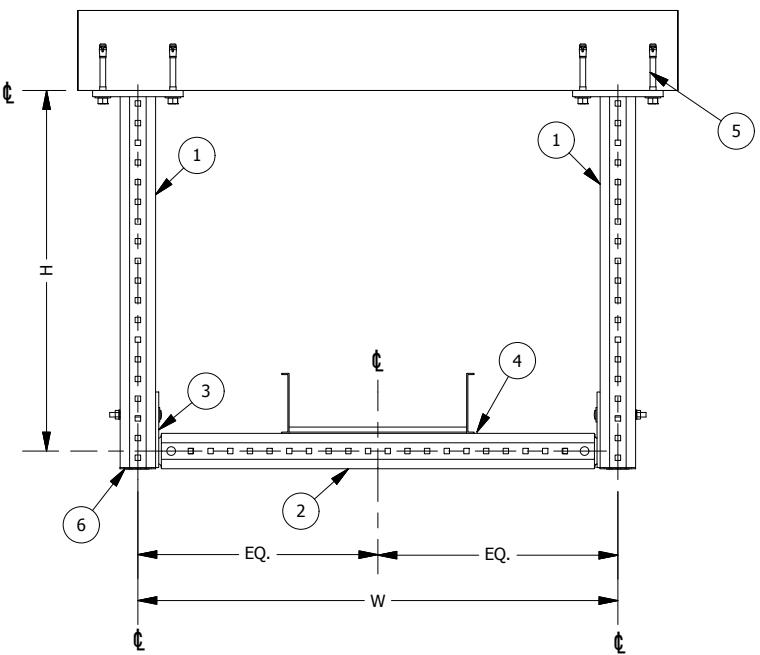
Piece Mark	Item No.*	Description	Qty.*
1	2174682	MIC-C90-DH WELDED BRACKET	2
2	2119866	GIRDER MIQ-90	1
3	2140257	CONNECTOR MIQC-90-MI	2
4	2183584	MIQM 3/8" WING NUT	2
5	VARIES	USE APPROPRIATE HILTI ANCHOR	8
6	432077	END CAP - MIA-EC-90	2



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):

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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-TR121-C**

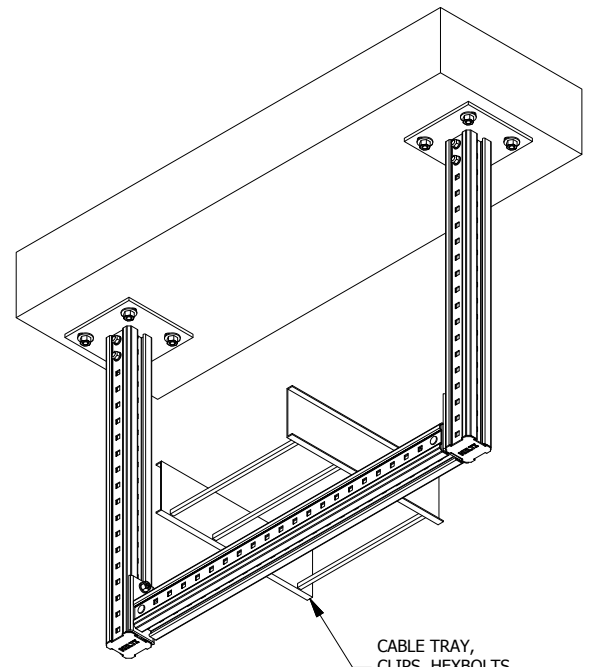
PROJECT DESCRIPTION:
CABLE TRAY TRAPEZE CONCRETE

HILTI

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

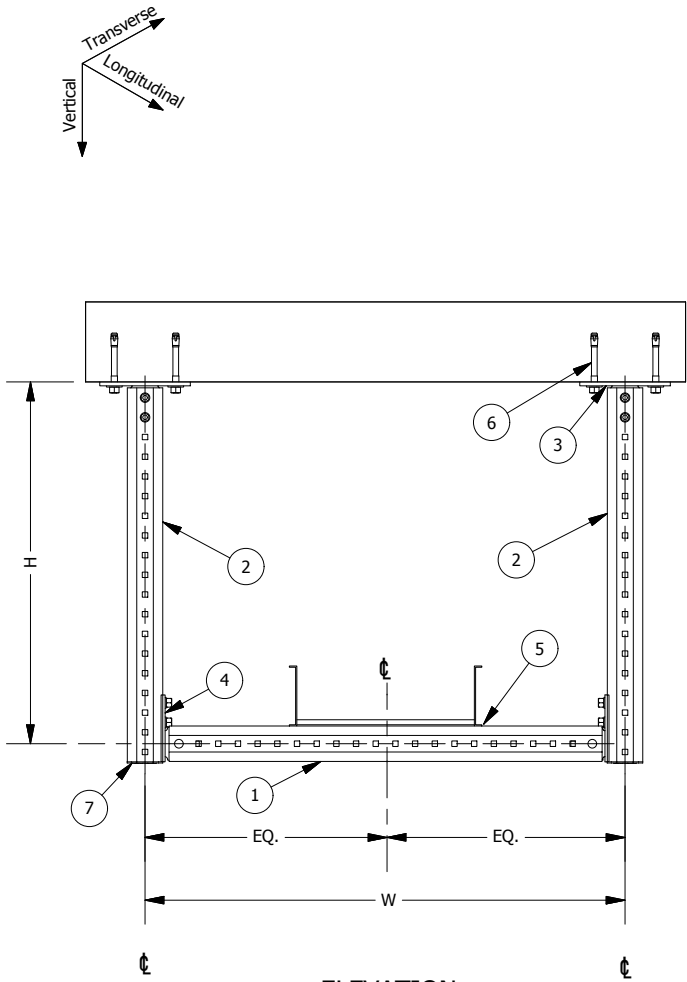
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Piece Mark	Item No.*	Description	Qty.*
1	2119866	GIRDER MIQ-90	1
2	2119866	GIRDER MIQ-90	2
3	2120144	MIQC-C90 BASE PLATE	2
4	2123881	MIQC-90HT	2
5	2183584	MIQM 3/8" WING NUT	2
6	VARIABLES	USE APPROPRIATE HILTI ANCHOR	8
7	432077	END CAP - MIA-EC-90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

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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



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

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

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