CONCRETE (BY OTHERS)

NOTES:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONAL LIMITS BASED ON DESIGN METHODOLOGY AND GENDER NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.), GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTIONS FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION.

G. USE 1/2" DIA. HILT KWIK BOLT-TZ WITH MIN. 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESR-1917 AND HILTI INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH F'c=3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".

H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.

TABLE A

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<tr>
<td>Longitudinal</td>
<td>218</td>
<td>142</td>
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G. X-BT REQUIREMENT: MIN. STEEL BASE MATERIAL THICKNESS SHALL BE 5/16". MIN EDGE DISTANCE SHALL BE 3/8". MIN YIELD STRENGTH OF STEEL SHALL BE FY=36KSI.
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**REVISION HISTORY**

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<table>
<thead>
<tr>
<th>Max H, in</th>
<th>Max W, in</th>
<th>Vertical (P)</th>
<th>Transverse</th>
<th>Longitudinal</th>
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<td>420 950 620</td>
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</table>

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<th>Load Type</th>
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<td>1320</td>
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</tbody>
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**ALLOWABLE LOADS, lbs**

<table>
<thead>
<tr>
<th>Type</th>
<th>Vertical (P)</th>
<th>Transverse</th>
<th>Longitudinal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max H, in</td>
<td>36</td>
<td>48</td>
<td>60</td>
</tr>
<tr>
<td>Max W, in</td>
<td>36</td>
<td>48</td>
<td>60</td>
</tr>
<tr>
<td>Vertical (P)</td>
<td>4400</td>
<td>3300</td>
<td>2600</td>
</tr>
<tr>
<td>Transverse</td>
<td>1320</td>
<td>990</td>
<td>780</td>
</tr>
<tr>
<td>Longitudinal</td>
<td>1320</td>
<td>990</td>
<td>780</td>
</tr>
</tbody>
</table>

**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 MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.
NOTE:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN HILTI MODULAR SUPPORTS ENGINEERING SOFTWARE. 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 ASSIGNED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.
F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION.
G. USE 1/2"dia. HILTI Kwik Bolt-TZ with MIN 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESR-1917 AND HILTI INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH F'c=3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".
H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.

TABLE A

<table>
<thead>
<tr>
<th>LOADS</th>
<th>Vertical (P)</th>
<th>Transverse</th>
<th>Longitudinal</th>
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<tbody>
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<td>48</td>
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<td>Max H, in</td>
<td>1400</td>
<td>850</td>
<td>470</td>
</tr>
<tr>
<td>ALLOWABLE LOADS, lbs</td>
<td>420</td>
<td>255</td>
<td>143</td>
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</tbody>
</table>
A. The typical support is load-rated and dimensionally limited based on design methodology and generic non-project-specific assumptions set forth in profits regular supports engineering software. 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) 2018. See Table A for allowable strength design loads (static L.N.O.); governing lateral loads noted in the allowable load table is maximum of 30% of dead load.

D. All loads assumed to act on the support, no eccentricity considered.

E. Maximum allowable loads noted in Table A are based on the governing 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 Hilti instruction for use sheet for required installation information. Thread forming bold may be installed using a torque wrench or SI-A122 for installation for use.

G. Use ½” Dia. Hilti Bolt-Tz with Min 3-5/8” effective embedment. Install anchor per ESR-1917 and Hilti’s instructions for use and recommendations. Min. concrete compressive strength $f'c =$ 3000 psi, Min. concrete edge distance = 6”, and Min. concrete thickness 6”.

H. Concrete anchors noted in the bill of materials are designed only for wind lateral loading. Engineer of record to verify adequacy of anchor when typical is being used for seismic lateral loading.

### Table A

<table>
<thead>
<tr>
<th></th>
<th>Max H, in</th>
<th>Max W, in</th>
<th>Vertical (P)</th>
<th>Transverse</th>
<th>Longitudinal</th>
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<tr>
<td></td>
<td>36</td>
<td>48</td>
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<td></td>
<td>4400</td>
<td>2800</td>
<td>2500</td>
<td>840</td>
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</table>

**Notes:**

1. **ISOMETRIC**

2. **ELEVATION**
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 PROFILES MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.
D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.
F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION 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.

NOTE:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN HILTI MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING 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 HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION.

G. USE 1/2" DIA. HILT Kwik Bolt-TZ with MIN 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESR-1917 AND HILTI INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH PC= 3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".

H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.

I. MT-C-GS-OC (#227066) MAY BE REPLACED WITH MT-C-GS A OC (#227068) WITHOUT REDUCTION OF LOADS.
The typical support is load-rated and dimensionally limited based on design methodology and generic, non-project-specific assumptions set forth in Hilti's modular supports engineering software. The engineer of record shall evaluate this typical support to determine its suitability for the actual project-specific design criteria and requirements.

A. The evaluation of existing structure is outside of the typical design scope and shall be performed by the engineer of record.

B. Typical support design is based on International Building Code (IBC) 2018. See Table-A for allowable strength design loads (static U.N.O.). Governing lateral loads noted in the allowable load table is maximum of 30% of dead load.

C. All loads assumed to act on the support, no eccentricity considered.

D. Maximum allowable loads noted in Table-A are based on the governing 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.

E. Refer to Hilti Instruction for Use Sheet for required installation information.

F. Use 1/2" dia. Hilti Kwik Bolt-TZ with min 3-5/8" effective embedment. Install anchor per ES-1917 and Hilti's instructions for use and recommendations. Min. concrete compressive strength f'c=3000 PSI, min. concrete edge distance = 5", and min. concrete thickness 6".

H. Concrete anchors noted in the bill of material are designed only for wind lateral loading. Engineer of record to verify adequacy of anchor when typical is being used for seismic lateral loading.

### Table A

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<td>387527</td>
<td>ANCHOR KB-TZ 1/2&quot; x 4-1/2&quot; SS304</td>
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STEEL (BY OTHERS)

NOTES:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN FROSTS MODULAR SUPPORTS ENGINEERING SOFTWARE. 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 ECCENTICITY CONSIDERED.
E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.
F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.
G. X-BT REQUIREMENT—MIN. STEEL BASE MATERIAL THICKNESS SHALL BE 5/16". MIN. EDGE DISTANCE SHALL BE 3/8". MIN YIELD STRENGTH OF STEEL SHALL BE FY=36KSI.

TABLE A

```
<table>
<thead>
<tr>
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<th>Max H, in</th>
<th>Max W, in</th>
<th>Vertical (P)</th>
<th>Transverse</th>
<th>Longitudinal</th>
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Historical Notes:

- 12/14/2020: Updated with additional notes.

PROJECT JOB SHEET

PROJECT NUMBER: TRAPEZE S 002

DRAWN: BIM 360://Hilti - MT Typicals/TR7S2.rvt

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 FROSTS MODULAR SUPPORTS ENGINEERING SOFTWARE. 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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CONCRETE (BY OTHERS)

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G. USE 1/2" DIA. HILTI KWIK BOLT-TZ WITH MIN 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESR-1917 AND HILTI'S INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH P'C = 3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".
H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.

TABLE A

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ALLOWABLE LOADS, lbs

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<th></th>
<th>Max H, in</th>
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<td>Transverse</td>
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<td>Longitudinal</td>
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</table>
NOTED:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFESSES ROLES SUPPORTS ENGINEERING SOFTWARE. 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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F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 INSTRUCTION FOR USE.
G. X-BT REQUIREMENT: MIN. STEEL BASE MATERIAL THICKNESS SHALL BE 5/16". MIN EDGE DISTANCE SHALL BE 3/8". MIN YIELD STRENGTH OF STEEL SHALL BE FY=36KSI.

TABLE A

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<tr>
<th></th>
<th>Max H, in</th>
<th>Max W, in</th>
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PROJECT NAME: TRAPEZE MT80 S 001

PROJECT DESCRIPTION:

REVISION HISTORY

PROJECT NUMBER: TR8S1

 träpeze (By Others)
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.

**NOTES:**

A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROJECT SPECIFIC SUPPORTS ENGINEERING SOFTWARE. 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.

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING 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 HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.

**TABLE A**

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<tr>
<th>Item No.</th>
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<td>MT-90 OC</td>
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**ALLOWABLE LOADS, lbs**

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<th>Transverse</th>
<th>Longitudinal</th>
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<td>750</td>
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<td>Transverse</td>
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<tr>
<td>Longitudinal</td>
<td>900</td>
<td>750</td>
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CONCRETE (BY OTHERS)

1. ISOMETRIC

NOTES:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC, NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLTS MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.

G. USE 3/8" DIA. HILTI Kwik Bolt-TZ WITH MIN 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR RBS ESR-1917 AND HILTI'S INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH F'C= 3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".

H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.

2. ELEVATION

TABLE A

<table>
<thead>
<tr>
<th>Max H, in</th>
<th>Max W, in</th>
<th>Vertical (IP)</th>
<th>Transverse</th>
<th>Longitudinal</th>
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<td>48</td>
<td>60</td>
<td>60</td>
<td>750</td>
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PROJECT NAME: TRAPEZE MT90 C 002

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 MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLTS MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.

G. USE 3/8" DIA. HILTI Kwik Bolt-TZ WITH MIN 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR RBS ESR-1917 AND HILTI'S INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH F'C= 3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".

H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.
The typical support is load-rated and dimensionally limited based on design methodology and generic, non-project-specific assumptions set forth in Hilti modular supports engineering software. The engineer of record shall evaluate this typical support to determine its suitability for the actual project-specific design criteria and requirements. The evaluation of existing structure is outside of the typical design scope and shall be performed by the engineer of record.

Typical support design is based on International Building Code (IBC) 2018. See Table A for allowable strength design loads (static U.N.O.). Governing lateral loads noted in the allowable load table is maximum of 30% of dead load.

All loads assumed to act on the support, no eccentricity considered.

Maximum allowable loads noted in Table A are based on the governing 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.

Refer to Hilti instruction for use sheet for required installation information.

Concrete anchors noted in the bill of material are designed only for wind lateral loading. Engineer of record to verify adequacy of anchor when typical is being used for seismic lateral loading.
NOTES:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN FROST MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.). GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.
D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.
F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.
G. X-BT REQUIREMENT: MIN. STEEL BASE MATERIAL THICKNESS SHALL BE 5/16". MIN EDGE DISTANCE SHALL BE 3/8". MIN YIELD STRENGTH OF STEEL SHALL BE FY=36KSI.

Table A

<table>
<thead>
<tr>
<th>Mark</th>
<th>Item No.</th>
<th>Description</th>
<th>QTY</th>
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<tbody>
<tr>
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**ISOMETRIC**

**N.T.S.**

**ELEVATION**

**N.T.S.**
NOTES:

A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATE L.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSIGNED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION.

G. USE ½" DIA. HILTI Kwik Bolt-TZ WITH MIN 3-5/8" EFFECTIVE EMBEDMENT, INSTALL ANCHOR PER ESR-1917 AND HILTI INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH F'c=3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".

H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.
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.

### TABLE A

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
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<tr>
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<td>2</td>
<td>2268369 MT-90 OC</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>VARIES MT-B-GXL S+ OC (SEE TABLE)</td>
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### NOTES:

A. The typical support is load rated and dimensionally limited based on design methodology and generic non-project specific assumptions set forth in HILTI Modular Supports Engineering Software. 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) 2018. See Table A for allowable strength design loads (static U.N.O.), governing lateral loads noted in the allowable load table is maximum of 30% of dead load.

D. All loads assumed to act on the support, no eccentricity considered.

E. Maximum allowable loads noted in Table A are based on the governing 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 Hilti Instruction for Use Sheet for required installation information. Thread-forming bolt may be installed using a torque wrench or G2-AT-A22 ABS Instruction for Use.
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING 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 HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLTS MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.

G. USE 1/2” DIA. HILT KWIK BOLT-TZ WITH MIN 3-5/8” EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESR-1917 AND HILTI'S INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH F’C=3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6”, AND MIN. CONCRETE THICKNESS 6”.

H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.

### TABLE A

<table>
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<tr>
<th></th>
<th>Max H, in</th>
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<th>Vertical (P)</th>
<th>Transverse</th>
<th>Longitudinal</th>
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### TRAPEZE MT90 C 003

- Project Name: TRAPEZE MT90 C 003
- Project Description: TRAPEZE MT90 C 003
- Drawn: BIM 360://Hilti - MT Typicals/TR9C3.rvt
- Checked: TR9C3
- Designed: TR9C3
- Reviewed: TR9C3

**NOTES:**

1. CONCRETE (BY OTHERS)
2. ISOMETRIC
3. ELEVATION
4. N.T.S.

**MARK** **ITEM NO.** **DESCRIPTION** **QTY.**
1. 2268369 MT-90 OC 2
2. 2268369 MT-90 OC 2
3. 2272103 MT-B-GL-04 OC 2
4. 2272075 MT-C-DELT T OC 8
5. 2272084 MT-TB8 OC 112
6. 387530 ANCHOR RB-TZ 5/8" X 4-3/4" SS304 8
7. 2273999 MT-EC-90 2
CONCRETE
(BY OTHERS)

NOTE:

A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC, NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PREVIOUSLY DEVELOPED SUPPORT SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

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F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION.

G. USE 1/2" DIA. HILTI KWIK BOLT-TZ WITH MIN. 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESR-1917 AND HILTI INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH FC= 3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".

H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.

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TABLE A

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<tr>
<th>Load Type</th>
<th>Max W, in.</th>
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NOTE:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFI MODULAR SUPPORTS ENGINEERING SOFTWARE. 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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F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.
G. X-BT REQUIREMENT: MIN. STEEL BASE MATERIAL THICKNESS SHALL BE 5/16". MIN EDGE DISTANCE SHALL BE 3/8". MIN YIELD STRENGTH OF STEEL SHALL BE FY=36KSI.
NOTES:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFS MODULAR Supports ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.), GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.
D. ALL LOADS ASSIGNED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.
F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION.
G. USE ½" DIA. HILT KWIK BOLT-TZ WITH MIN 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESR-1917 AND HILTI’S INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH F’C= 3000 PSI, MIN. CONCRETE EDGE DISTANCE = 5", AND MIN. CONCRETE THICKNESS 6".
H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.

### TABLE A

<table>
<thead>
<tr>
<th>Type</th>
<th>Max Wt, lbs</th>
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<tr>
<td>Longitudinal</td>
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<td>173</td>
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**CONCRETE**

**CONCRETE (BY OTHERS)**

**TRAPEZE MT80 C 003**

**TRAPEZE MT80 C 003**

**REVISION HISTORY**

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**MARK ITEM NO. DESCRIPTION QTY.**

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<td>MT-80 L OC</td>
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<td>6</td>
<td>287527</td>
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<tr>
<td>7</td>
<td>2273698</td>
<td>MT-EC-80</td>
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The typical support is load rated and dimensionally limited based on design methodology and generic non-project specific assumptions set forth in Profis Modular Supports Engineering Software. The engineer of record shall evaluate this typical support to determine its suitability for the actual project specific design criteria and requirements. The evaluation of existing structure is outside of the typical design scope and shall be performed by the engineer of record. Typical support design is based on International Building Code (IBC) 2018. See Table A for allowable strength design loads (statutory loads). Governing lateral loads noted in the allowable load table is maximum of 30% of dead load.

D. All loads assumed to act on the support, no eccentricity considered.
E. Maximum allowable loads noted in Table A are based on the governing 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 Hilti Instruction for Use Sheet for required installation information.
G. Use 1/2" dia. Hilti Kwik Bolt-TZ with min 3.5" effective embedment. Install anchor per ESR-1917 and Hilti instructions for use and recommendations. Min concrete compressive strength F’c = 3000 psi, Min. concrete edge distance = 6", and Min. concrete thickness 6".
H. Concrete anchors noted in the bill of material are designed only for wind lateral loading. Engineer of record to verify adequacy of anchor when typical is being used for seismic lateral loading.
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 MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.). GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.

G. X-BT REQUIREMENT: MIN. STEEL BASE MATERIAL THICKNESS SHALL BE 5/16". MIN EDGE DISTANCE SHALL BE 3/8". MIN YIELD STRENGTH OF STEEL SHALL BE FY=36KSI.
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.

NOTES:
A. THE TYPICAL SUPPORT IS LOAD-RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN HILTI MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSIGNED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A COMBINATION ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLTS MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.

G. USE ½" DIA. HILT KWIK BOLT-TZ WITH MIN 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESR-1917 AND HILTI'S INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH F'c=3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".

H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.
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.

NOTES:

A. The Typical Support is load rated and dimensionally limited based on design methodology and generic non-project specific assumptions set forth in Profis Modular Supports Engineering Software. The Engineer of Record shall evaluate this typical support to determine its suitability for the actual project specific design criteria and requirements.

B. 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) 2018. See Table A for allowable strength design loads (static U.N.O.), governing lateral loads noted in the allowable load table is maximum of 35% of dead load.

D. All loads assumed to act on the support, no eccentricity considered.

E. Maximum allowable loads noted in Table A are based on the governing 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 Hilti Instruction for Use sheet for required installation information. Thread forming bolt may be installed using a torque wrench or G2-AT-A22 RIS instruction for use.

TABLE A

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>QTY.</th>
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</thead>
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<td>2268369</td>
<td>MT-90 OC</td>
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<td>VARIENS</td>
<td>MT-B-GXL S+ OC</td>
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</tr>
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<td>2272075</td>
<td>MT-C-GLP T OC</td>
<td>2</td>
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<td>2272084</td>
<td>MT-TFB OC</td>
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ALLOWSABLE LOADS, lbs

<table>
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<tr>
<th></th>
<th>Transverse</th>
<th>Longitudinal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max H, in</td>
<td>48 60</td>
<td>570</td>
</tr>
<tr>
<td>Max W, in</td>
<td>48 60</td>
<td>570</td>
</tr>
</tbody>
</table>
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.

**NOTE:**

A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFI S MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD OR WIND LOADING BASED ON WIND CRITERIA NOTED ON WIND DESIGN BASIS SHEET.

D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION.

G. USE 1/4” DIA. HILT KWIK BOLT-TZ WITH MIN 3-5/8” EFFECTIVE EMBEDMENT. INSTALL ANCHOR RIS ESR-1917 AND HILTI INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH FC= 3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6”, AND MIN. CONCRETE THICKNESS 6”.

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D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.
E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD EQUAL DISTANCE FROM END. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.
F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.
G. X-BT REQUIREMENT: MIN. STEEL BASE MATERIAL THICKNESS SHALL BE 5/16". MIN EDGE DISTANCE SHALL BE 3/8". MIN YIELD STRENGTH OF STEEL SHALL BE FY=36KSI.

**TABLE A**

<table>
<thead>
<tr>
<th>Description</th>
<th>Allowable Loads, lbs</th>
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<tbody>
<tr>
<td>Vertical (P)</td>
<td>Max W, in: 24 36 48</td>
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<tr>
<td>Max H, in: 24</td>
<td></td>
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<tr>
<td>Transverse</td>
<td>105 48 27</td>
</tr>
<tr>
<td>Longitudinal</td>
<td>105 48 27</td>
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</tbody>
</table>

**REVISION HISTORY**

1. ISSUE FOR REVIEW 09/21/2020
2. ISSUE FOR REVIEW 12/14/2020
3. ISSUE FOR REVIEW 1/27/2021

**NOTES:**
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROPS MODULAR SUPPORTS ENGINEERING SOFTWARE. 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.
E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD EQUAL DISTANCE FROM END. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.
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**TABLE A**

<table>
<thead>
<tr>
<th>Description</th>
<th>Allowable Loads, lbs</th>
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</thead>
<tbody>
<tr>
<td>Vertical (P)</td>
<td>Max W, in: 24 36 48</td>
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<tr>
<td>Max H, in: 24</td>
<td></td>
</tr>
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<td>Transverse</td>
<td>105 48 27</td>
</tr>
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D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD EQUAL DISTANCE FROM END. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.

G. X-BT REQUIREMENT: MIN. STEEL BASE MATERIAL THICKNESS SHALL BE 5/16". MIN. EDGE DISTANCE SHALL BE 2/8". MIN. YIELD STRENGTH OF STEEL SHALL BE FY=36KSI.

TABLE A

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MAX H, in

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<th>Load</th>
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<tbody>
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Max W, in

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</thead>
<tbody>
<tr>
<td>Max W, in</td>
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<td>36</td>
<td>48</td>
</tr>
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Vertical (P)

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<th>Longitudinal</th>
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<tbody>
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Transverse (P)

<table>
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</thead>
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<td>72</td>
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Longitudinal (P)

<table>
<thead>
<tr>
<th>Load</th>
<th>Vertical</th>
<th>Transverse</th>
<th>Longitudinal</th>
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</thead>
<tbody>
<tr>
<td>Longitudinal (P)</td>
<td>240</td>
<td>90</td>
<td>72</td>
</tr>
</tbody>
</table>
A. The typical support is load-rated and dimensionally limited based on design methodology and generic non-project specific assumptions set forth in Hilti's modular supports engineering software. 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) 2018. See Table A for allowable strength design loads (static U.N.O.), governing lateral loads noted in the allowable load table is maximum of 30% of dead load or wind loading based on wind criteria noted on wind design basis sheet.

D. All loads assumed to act on the support, no eccentricity considered.

E. Imposed allowable loads noted in Table A are based on the governing combination of vertical load with transverse load or vertical load with longitudinal load equal distance from end. A separate analysis must be performed when transverse and longitudinal load occurs simultaneously.

F. Refer to Hilti Instruction for Use sheet for required installation information.

G. Use 1/2" Dia. Hilti Kwik Bolt-TZ with min. 3-5/8" effective embedment. Install anchor Rod (gs-1917 and Hilti's instructions for use and recommendations. Min. concrete compressive strength PC=3000 PSI, Min. concrete edge distance = 6", and Min. concrete thickness 6".

H. Concrete anchors noted in the bill of materials and designed for wind lateral loading. Engineers of record to verify adequacy of anchor when typical is being used for seismic lateral loading.
The typical support is load rated and dimensionally limited based on design methodology and generic non-project specific assumptions set forth in Hilti Pro-Files Modular Supports Engineering Software. The Engineer of Record shall evaluate this typical support to determine its suitability for the actual project specific design criteria and requirements.

The evaluation of existing structure is outside of the typical design scope and shall be performed by the Engineer of Record.

Typical support design is based on International Building Code (IBC 2018). See Table-A for allowable strength design loads (static live); governing lateral loads noted in the allowable load table is maximum of 30% of dead load.

All loads assumed to act on the support, no eccentricity considered.

Max allowable loads noted in Table-A are based on the governing combination of vertical load with transverse load or vertical load with longitudinal load equal distance from end. A separate analysis must be performed when transverse and longitudinal load occurs simultaneously.

Refer to Hilti Instruction for Use sheet for required installation information. Thread forming bolt may be installed using a torque wrench or Si-At-A22 PPS instruction for use.

X-BT Requirement: Min. Steel Base Material Thickness shall be 5/16”. Min. Edge Distance shall be 3/8”. Min. Yield Strength of Steel shall be FY=36KSI.

**Table A**

| Max H, in | 24 | 36 | 48 |
| Max W, in | 24 | 36 | 48 |

**Allowable Loads, lbs**

- Vertical (P): 375, 160, 90
- Transverse: 112, 48, 27
- Longitudinal: 112, 48, 27

**Notes:**

- The typical support is load rated and dimensionally limited based on design methodology and generic non-project specific assumptions set forth in Hilti Pro-Files Modular Supports Engineering Software. The Engineer of Record shall evaluate this typical support to determine its suitability for the actual project specific design criteria and requirements.
- The evaluation of existing structure is outside of the typical design scope and shall be performed by the Engineer of Record.
- Typical support design is based on International Building Code (IBC 2018). See Table-A for allowable strength design loads (static live); governing lateral loads noted in the allowable load table is maximum of 30% of dead load.
- All loads assumed to act on the support, no eccentricity considered.
- Max allowable loads noted in Table-A are based on the governing combination of vertical load with transverse load or vertical load with longitudinal load equal distance from end. A separate analysis must be performed when transverse and longitudinal load occurs simultaneously.
- Refer to Hilti Instruction for Use sheet for required installation information. Thread forming bolt may be installed using a torque wrench or Si-At-A22 PPS instruction for use.
- X-BT Requirement: Min. Steel Base Material Thickness shall be 5/16”. Min. Edge Distance shall be 3/8”. Min. Yield Strength of Steel shall be FY=36KSI.
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.

NOTES:
A. THE TYPICAL SUPPORT IS LOAD-RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS MODULE SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.); GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSIGNED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD EQUAL DISTANCE FROM END. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION.

G. USE ½" DIA. HILT KWIK BOLT-TZ WITH MIN 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESR-1917 AND HILTI'S INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH F'C=3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".

H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.

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TABLE A

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PROJECT NAME: T-POST MT80 C 001
PROJECT JOB SHEET: TP8C1
NOTE:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN HILTI MODULAR SUPPORTS ENGINEERING SOFTWARE. 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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.), GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

D. ALL LOADS ASSUMED TO ACT ON THE SUPPORT, NO ECCENTRICITY CONSIDERED.

E. MAXIMUM ALLOWABLE LOADS NOTED IN TABLE-A ARE BASED ON THE GOVERNING COMBINATION OF VERTICAL LOAD WITH TRANSVERSE LOAD OR VERTICAL LOAD WITH LONGITUDINAL LOAD EQUAL DISTANCE FROM ENDS. A SEPARATE ANALYSIS MUST BE PERFORMED WHEN TRANSVERSE AND LONGITUDINAL LOAD OCCUR SIMULTANEOUSLY.

F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORMING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR SI-AT-A22 PER INSTRUCTION FOR USE.

G. X-BT REQUIREMENT: MIN. STEEL BASE MATERIAL THICKNESS SHALL BE 5/16". MIN. EDGE DISTANCE SHALL BE 2XPT. MIN. YIELD STRENGTH OF STEEL SHALL BE FY=36KSI.
NOTE:
A. THE TYPICAL SUPPORT IS LOAD RATED AND DIMENSIONALLY LIMITED BASED ON DESIGN METHODOLOGY AND GENERIC NON-PROJECT SPECIFIC ASSUMPTIONS SET FORTH IN PROFIS MODULAR SUPPORTS ENGINEERING SOFTWARE. THE ENGINEER OF RECORD SHALL EVALUATE THE TYPICAL SUPPORT TO DETERMINE ITS SUITABILITY FOR THE ACTUAL PROJECT SPECIFIC DESIGN CRITERIA AND REQUIREMENTS.

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F. REFER TO HILTI INSTRUCTION FOR USE SHEET FOR REQUIRED INSTALLATION INFORMATION. THREAD FORGING BOLT MAY BE INSTALLED USING A TORQUE WRENCH OR GG-AT-A2 PER INSTRUCTION FOR USE.

G. USE 1/2" DIA. HILTI KWIK BOLT-TZ WITH MIN 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESR-1917 AND HILTI'S INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMPRESSIVE STRENGTH F'C=3000 PSI, MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".

H. CONCRETE ANCHORS NOTED IN THE BILL OF MATERIAL ARE DESIGNED ONLY FOR WIND LATERAL LOADING. ENGINEER OF RECORD TO VERIFY ADEQUACY OF ANCHOR WHEN TYPICAL IS BEING USED FOR SEISMIC LATERAL LOADING.
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G. X-BT REQUIREMENT: MIN. STEEL BASE MATERIAL THICKNESS SHALL BE 5/16", MIN EDGE DISTANCE SHALL BE 3/8", MIN YIELD STRENGTH OF STEEL SHALL BE FY=36KSI.

**TABLE A**

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**PROJECT DESCRIPTION:**
STANCHION_MT70_S_001

**DRAWN:**
BIM 360://Hilti - MT Typicals/ST7S1.rvt

**DESCRIPTION:**
STANCHION_MT70_S_001

**MARK** | **ITEM NO.** | **DESCRIPTION** | **QTY.**
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3 | 2272084 | MT-TFB OC | 6
4 | 2194341 | K-BT-MR W10/15 SN 8 | 4
5 | 2273697 | MT-SF-70 | 1

**NOTE(S):**
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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) 2018. SEE TABLE-A FOR ALLOWABLE STRENGTH DESIGN LOADS (STATIC U.N.O.). GOVERNING LATERAL LOADS NOTED IN THE ALLOWABLE LOAD TABLE IS MAXIMUM OF 30% OF DEAD LOAD.

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G. USE 1/2" DIA. HILT Kwik Bolt-TZ with MIN 3-5/8" EFFECTIVE EMBEDMENT. INSTALL ANCHOR PER ESG-1517 AND HILTI’S INSTRUCTIONS FOR USE AND RECOMMENDATIONS. MIN. CONCRETE COMpressive STRENGTH FC=3000 PSI. MIN. CONCRETE EDGE DISTANCE = 6", AND MIN. CONCRETE THICKNESS 6".

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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) 2018. See Table A for allowable strength design loads (state, U.S.D.): Governing lateral loads noted in the allowable load table is maximum of 30% of dead load.

D. All loads assumed to act on the support, no eccentricity considered.

E. Maximum allowable loads noted in Table A are based on the governing 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 Hilti Instruction for Use Sheet for required installation information. Threaded/locking bolt may be installed using a torque wrench or SI-AT-A22 125/250 for use.

G. X-BT requirement: Min. steel base material thickness shall be 5/16". Min. edge distance shall be 3/8”. Min yield strength of steel shall be FY=36ksi.

### Table A

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**NOTE:**
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