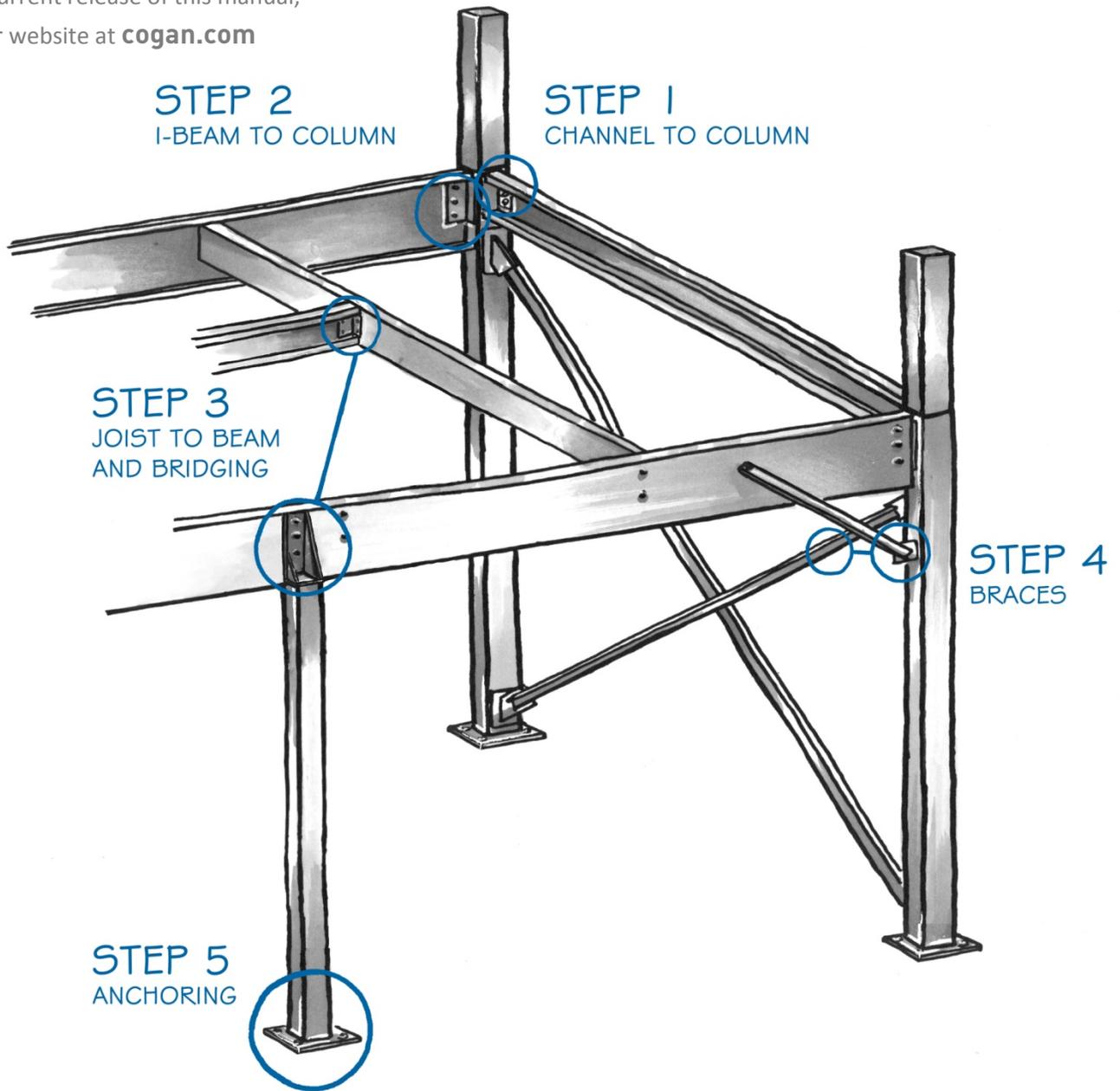


# INSTALLATION MANUAL

For the most current release of this manual,  
please visit our website at [cogan.com](http://cogan.com)

V.2013.2



<b>Product</b>	Mezzanine
<b>Sub-product</b>	General structure

- All bolted connections.
- Step by step assembly for columns, beams, joists, bridging and braces.
- Refer to assembly drawing for additional details to your specific structure.



[cogan.com](http://cogan.com)



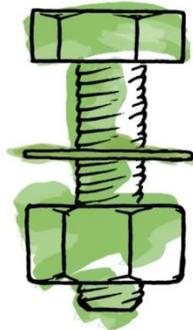
ø1/4"x1" HEX  
HEAD TEK SCREW



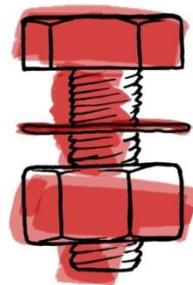
ø5/8"x6" BOLT  
(ANCHOR)



ø5/8"x2 1/4" BOLT



ø5/8"x1 3/4" BOLT



ø5/8"x1 1/4" BOLT



USE ASTM A325 STRUCTURAL BOLTS ONLY

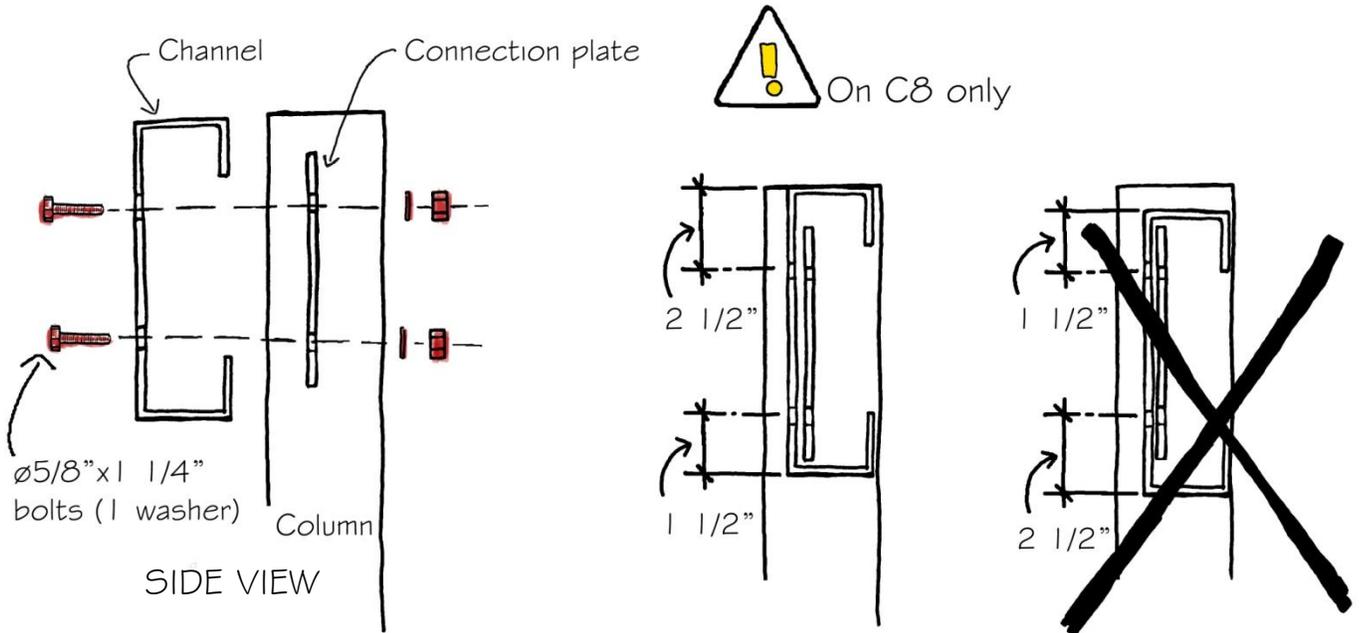
# STEP 1

## CHANNEL TO COLUMN CONNECTION (SINGLE CHANNEL)

C8 - C10 - C12



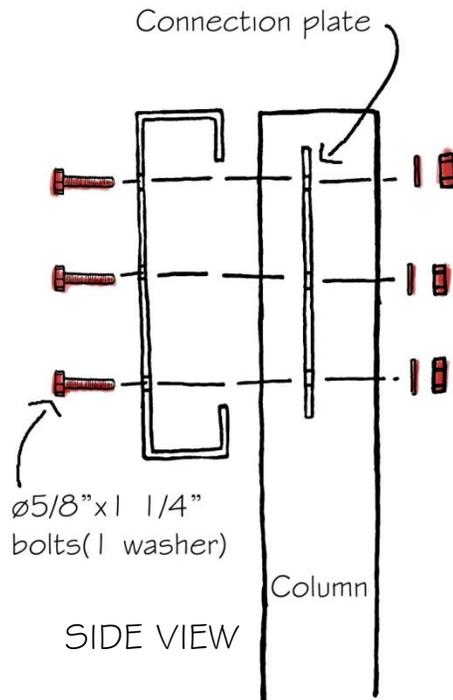
ASSEMBLE ACCORDING TO THE ORIENTATION INDICATED ON THE INSTALLATION PLAN



C14 - C16

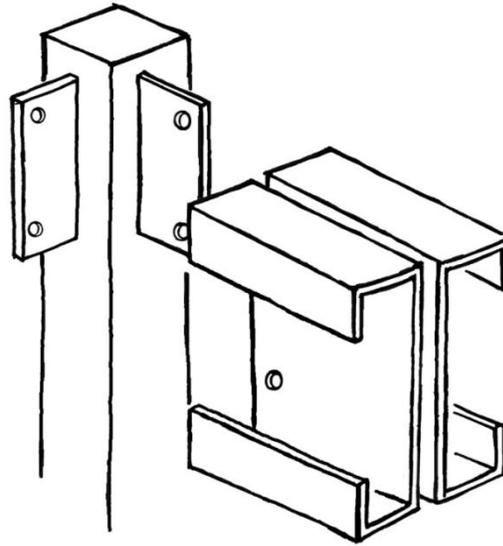
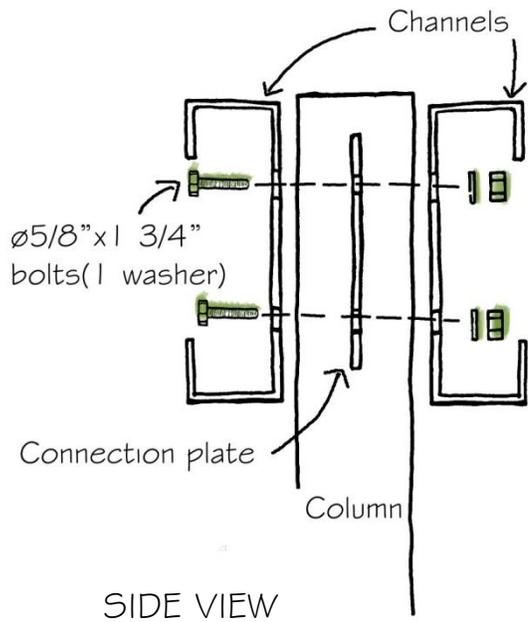


ASSEMBLE ACCORDING TO THE ORIENTATION INDICATED ON THE INSTALLATION PLAN

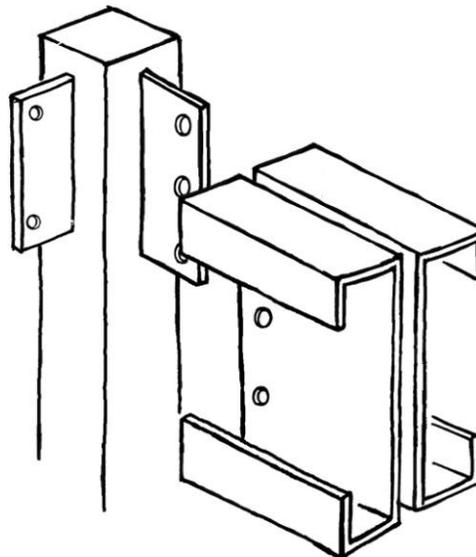
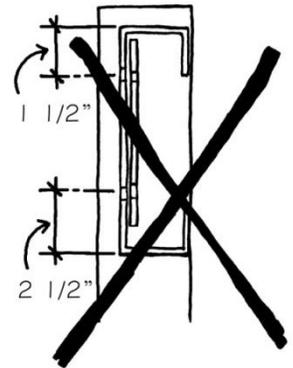
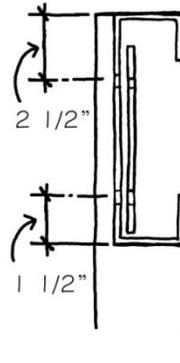
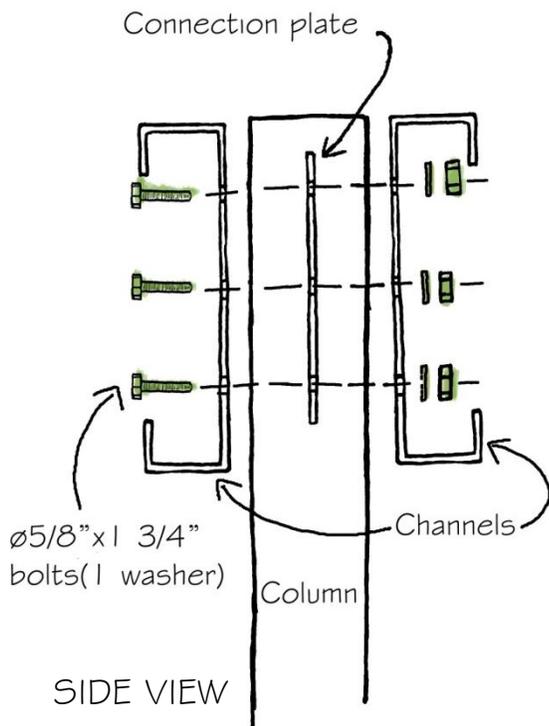


# CHANNEL TO COLUMN CONNECTION (BACK TO BACK CHANNEL)

DC8 - DC10 -DC12



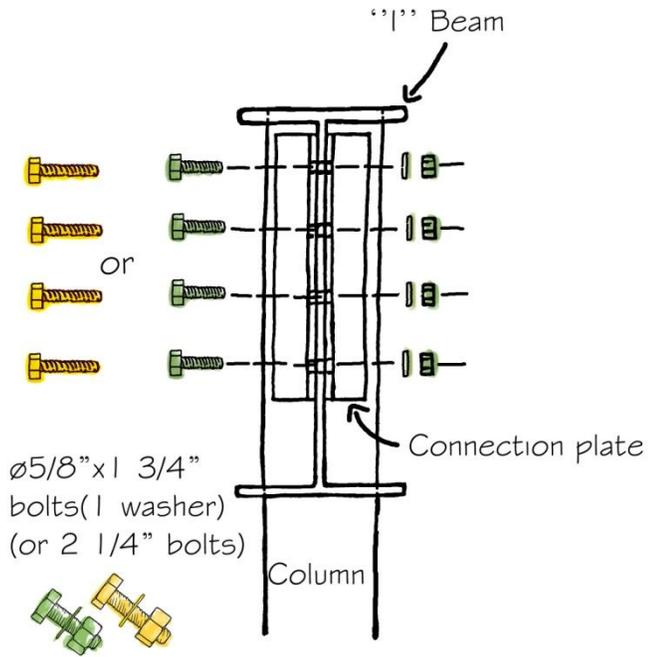
DC14 - DC16



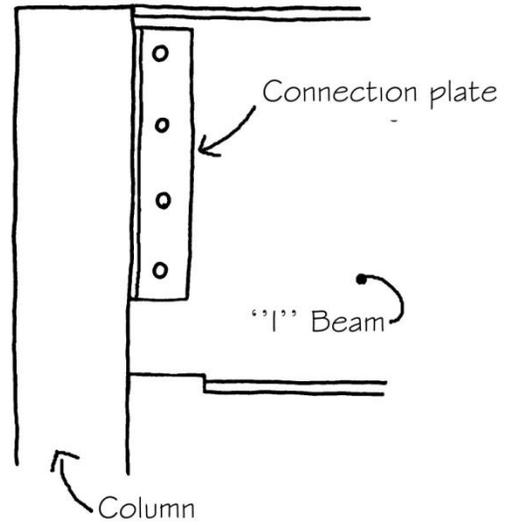
# STEP 2

## I-BEAM TO COLUMN CONNECTION (DOUBLE CONNECTION ANGLE)

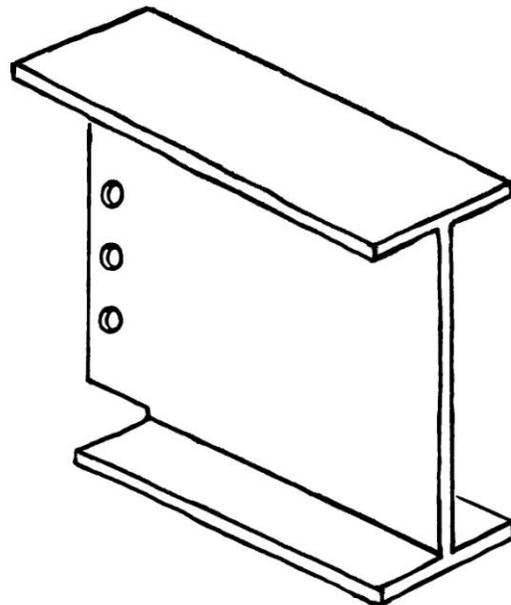
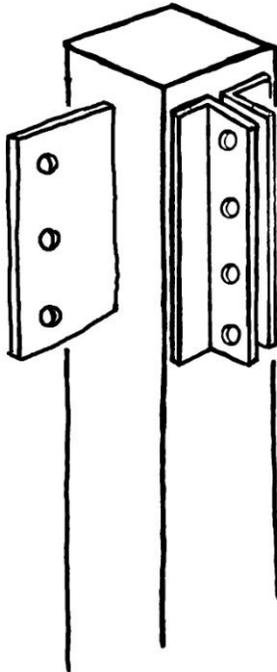
 ASSEMBLE ACCORDING TO THE ORIENTATION INDICATED ON THE INSTALLATION PLAN



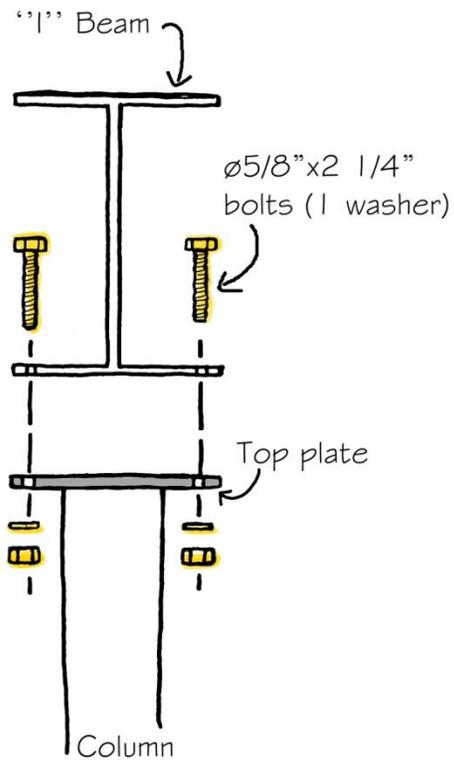
SIDE VIEW



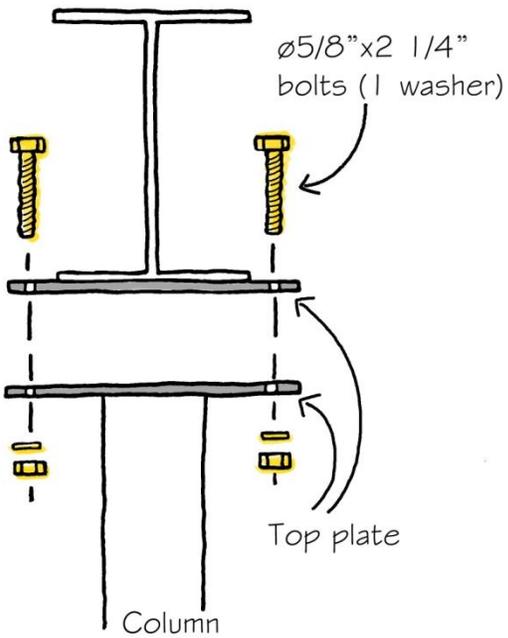
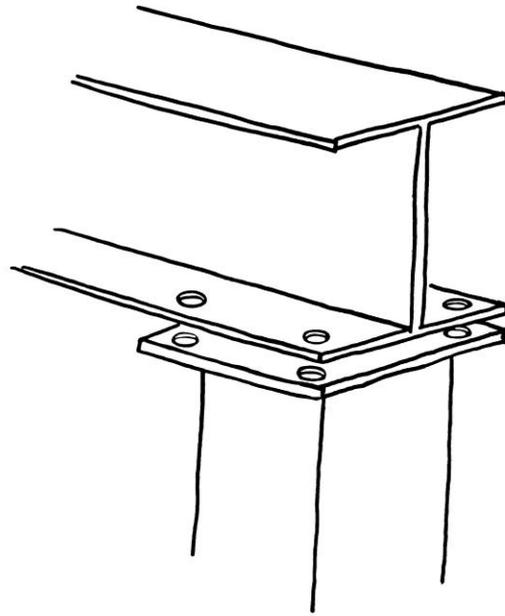
FRONT VIEW



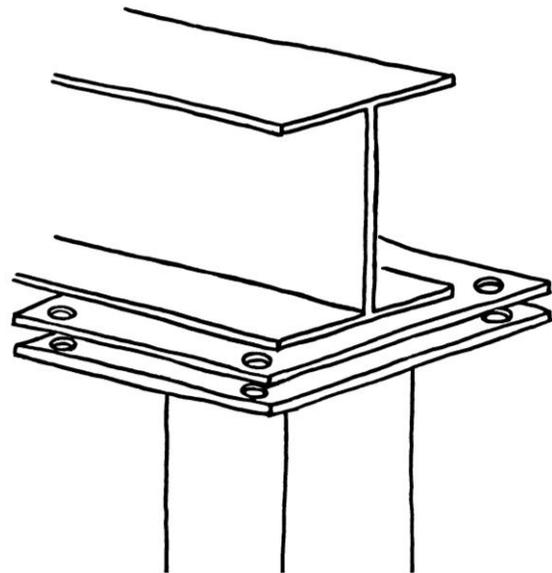
# I-BEAM TO COLUMN CONNECTION (MOUNTED TO COLUMN TOP PLATE)



SIDE VIEW



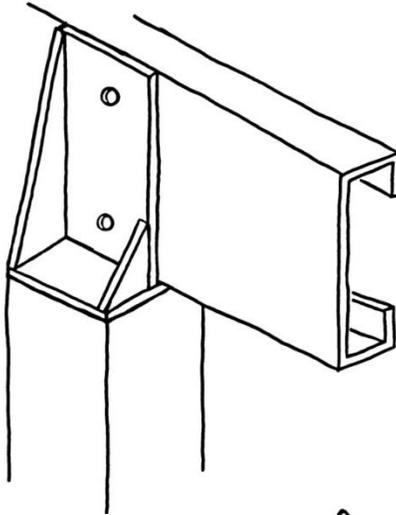
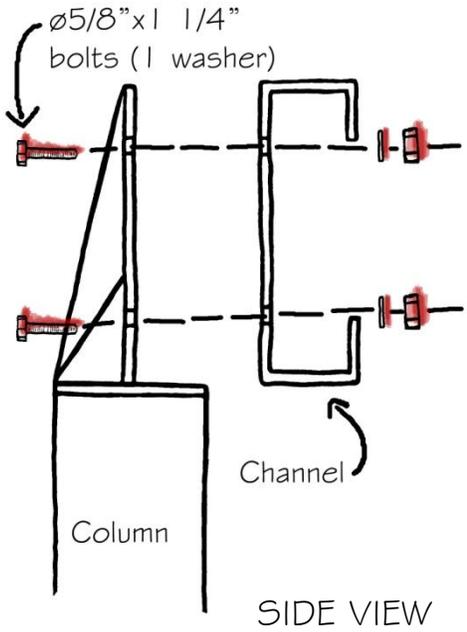
SIDE VIEW



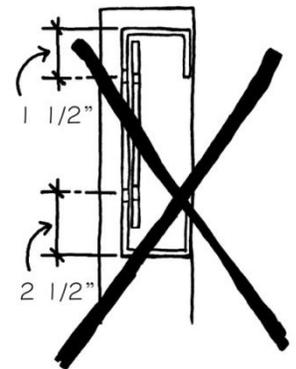
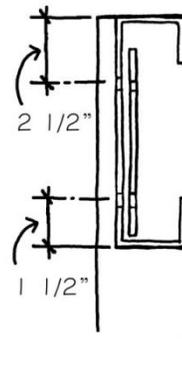
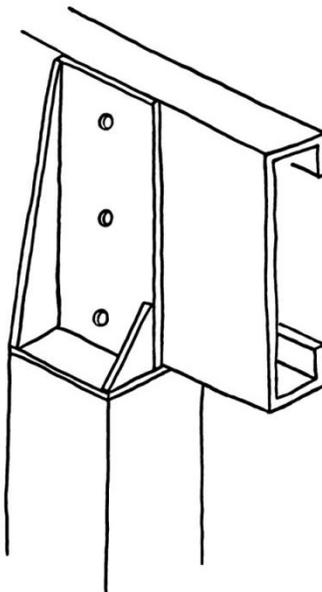
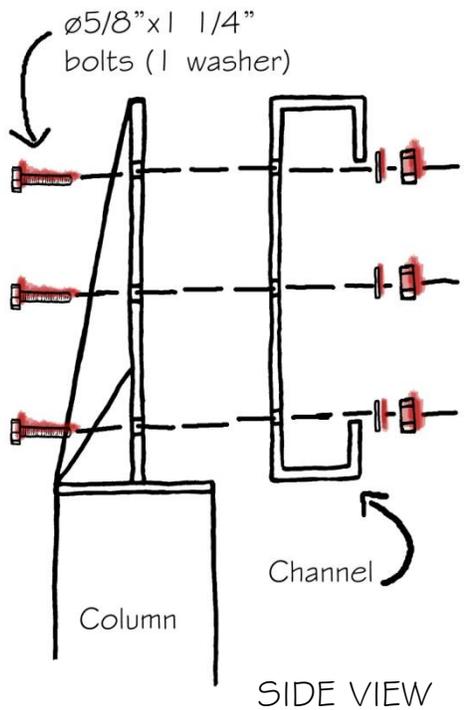
# STEP 3

## JOIST TO BEAM CONNECTION (CANTILEVER SINGLE CHANNEL ASSEMBLY)

C8 - C10 - C12

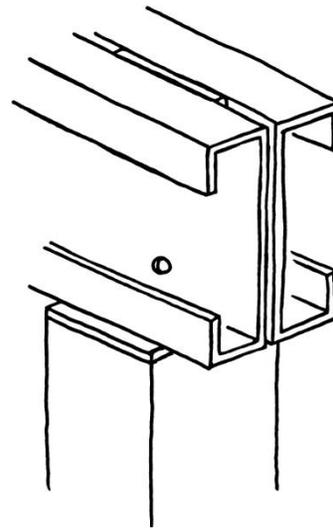
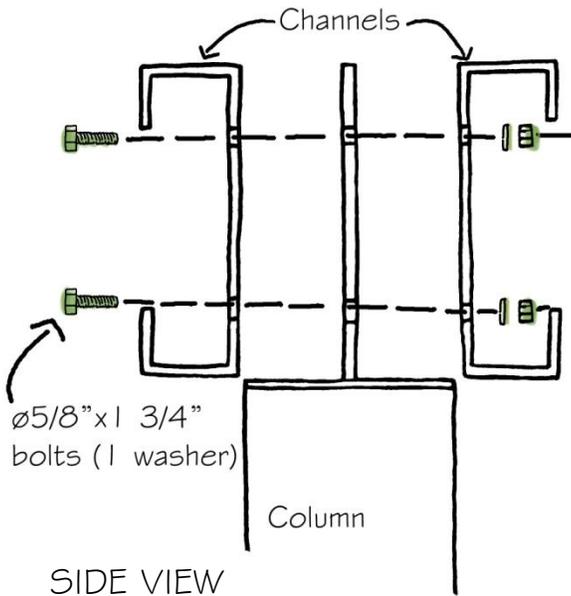


C14 - C16

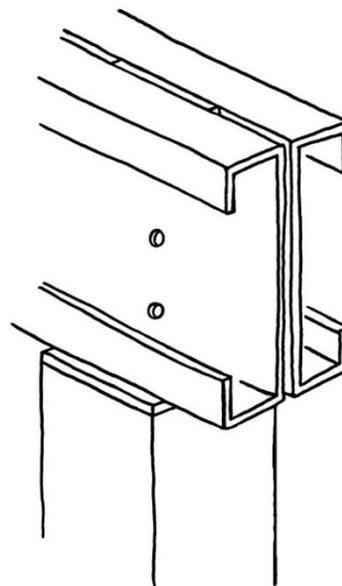
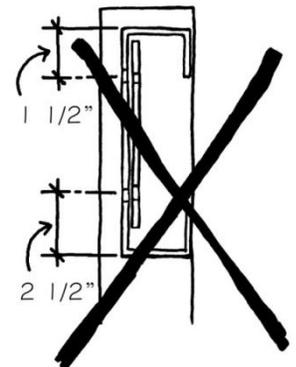
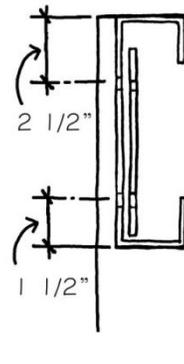
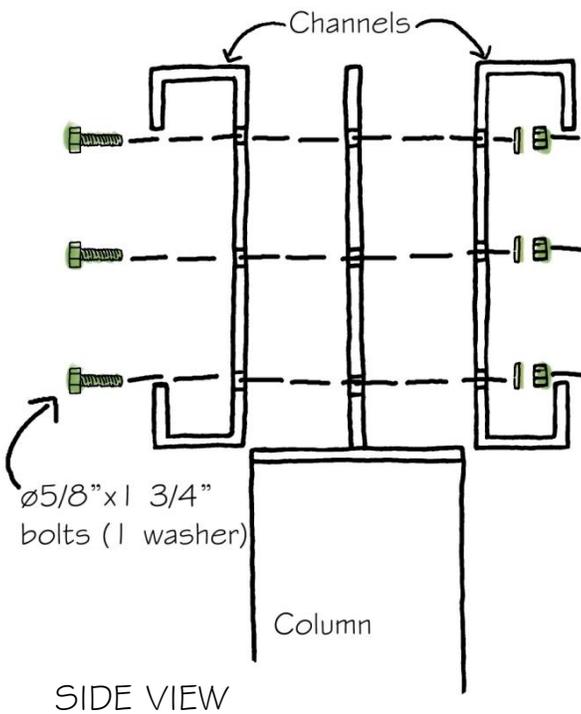


# JOIST TO BEAM CONNECTION (CANTILEVER BACK TO BACK CHANNEL ASSEMBLY)

C8 - C10 - C12

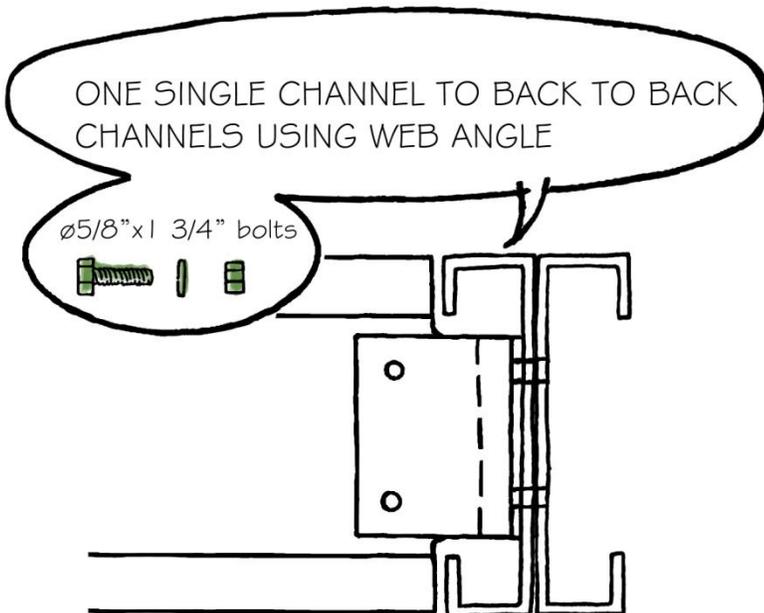
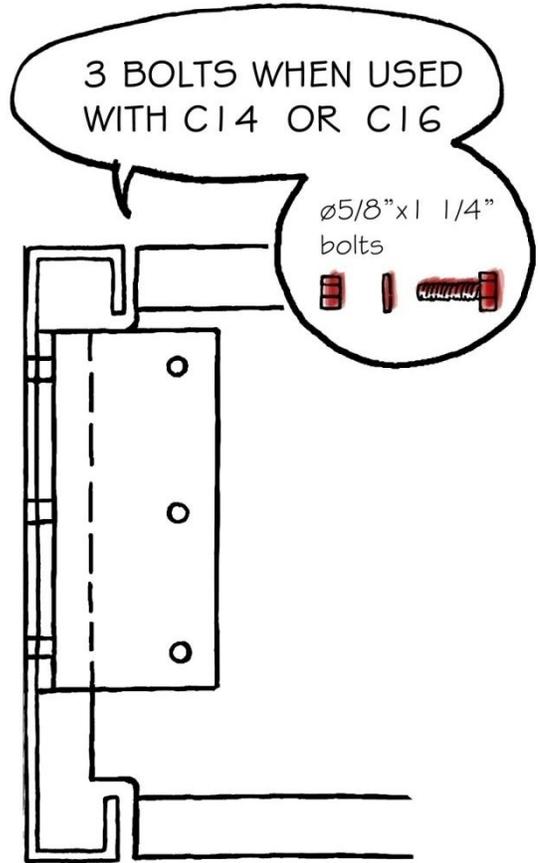
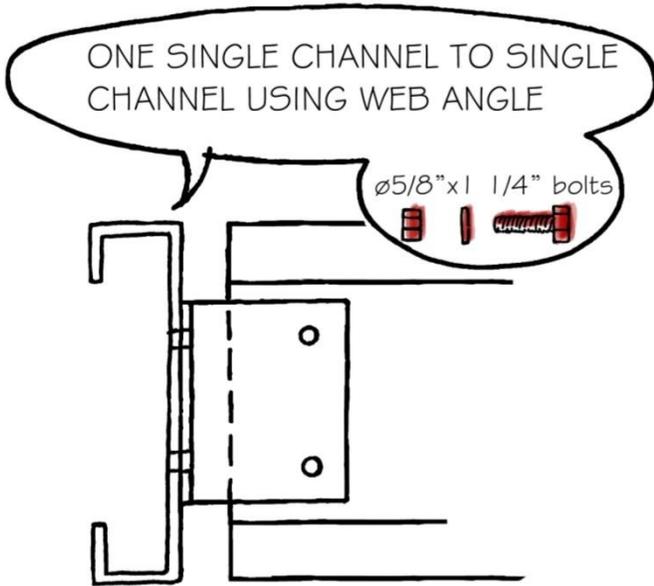


C14 - C16



# JOIST TO BEAM CONNECTION (CHANNEL TO CHANNEL USING WEB ANGLE)

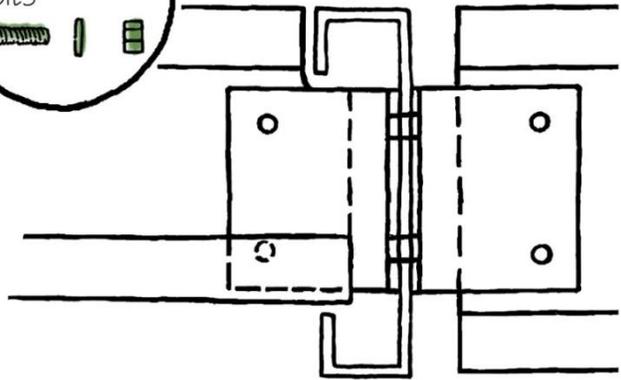
C8 - C10 - C12



# JOIST TO BEAM CONNECTION (CHANNEL TO CHANNEL USING WEB ANGLE)

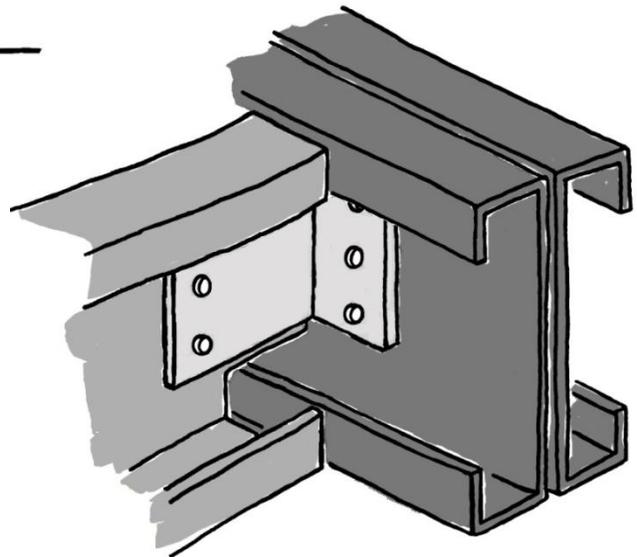
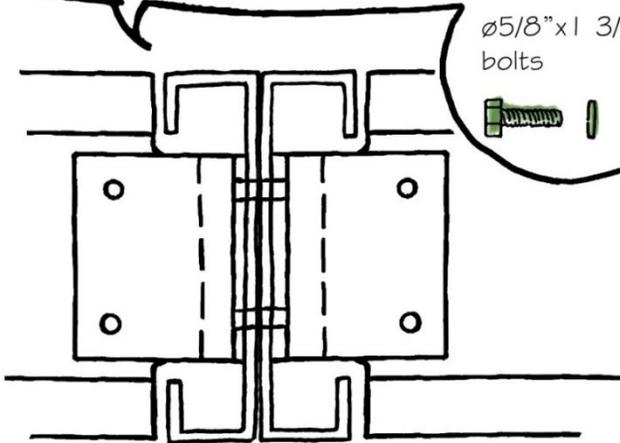
TWO SINGLE CHANNELS TO SINGLE CHANNEL USING WEB ANGLE

$\phi 5/8$ " x  $1\ 3/4$ " bolts



TWO SINGLE CHANNELS TO BACK TO BACK CHANNELS USING WEB ANGLE

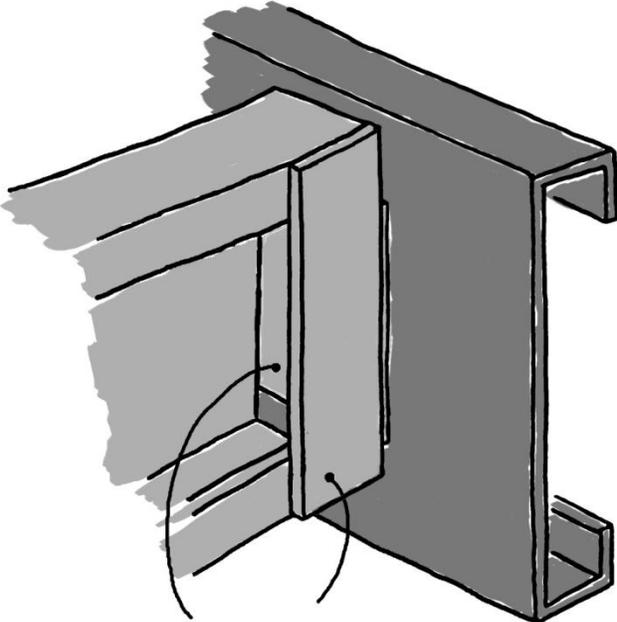
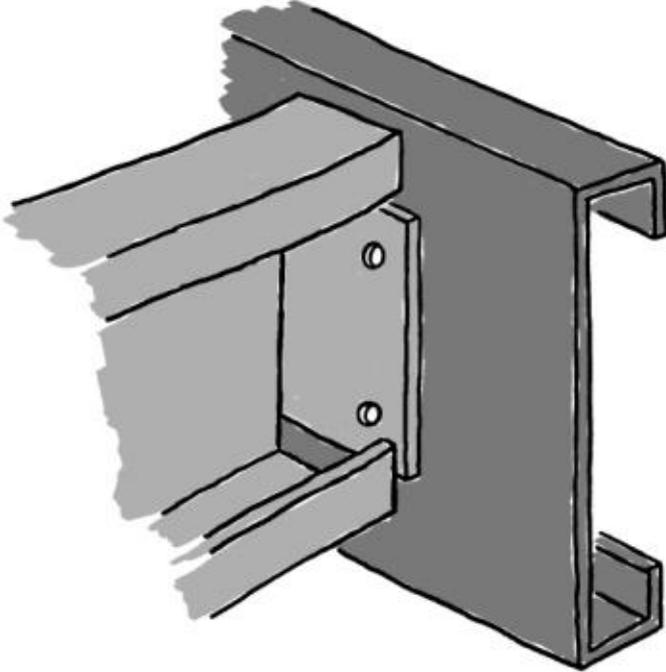
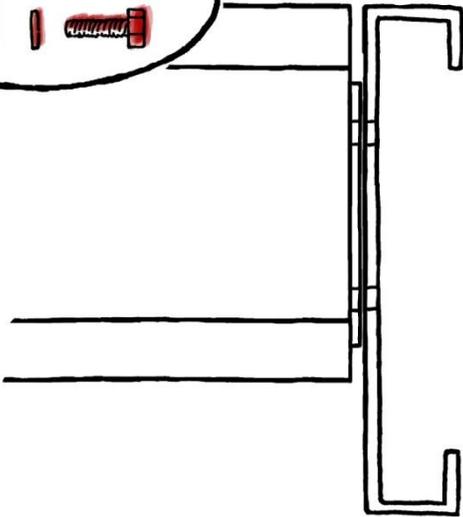
$\phi 5/8$ " x  $1\ 3/4$ " bolts



JOIST TO BEAM CONNECTION (CHANNEL TO CHANNEL USING WELDED CONNECTION PLATE)

SINGLE CHANNEL TO SINGLE CHANNEL USING WELDED CONNECTION PLATE

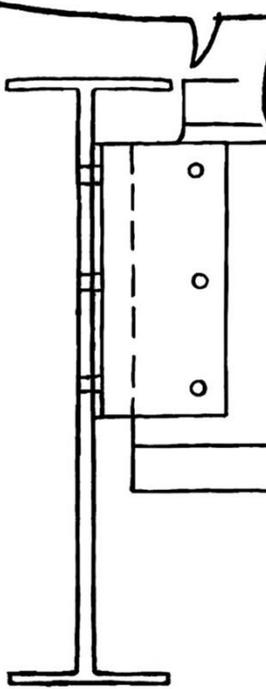
ø5/8"x1 1/4" bolts



OPTION WITH WELDED CONNECTION PLATE AND STIFFENER

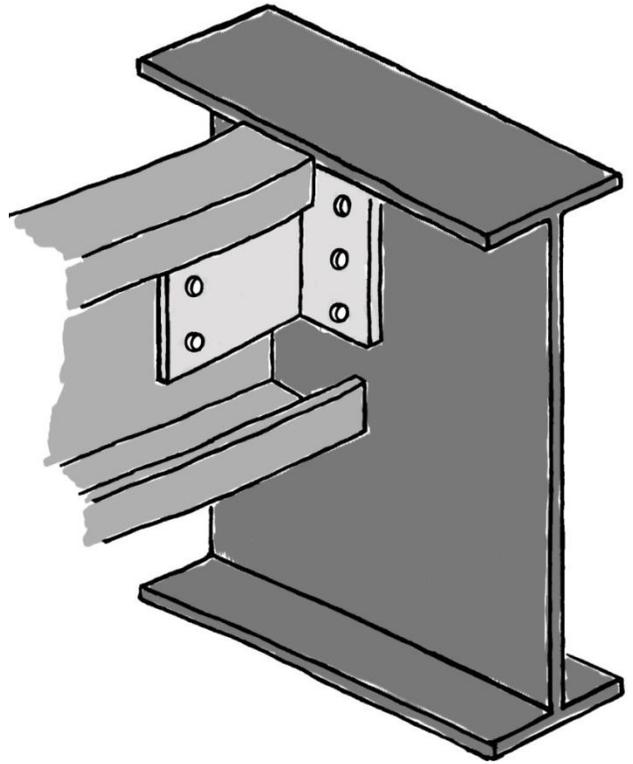
# JOIST TO BEAM CONNECTION (CHANNEL TO I-BEAM USING WEB ANGLE)

ONE SINGLE CHANNEL TO SINGLE I-BEAM USING WEB ANGLE

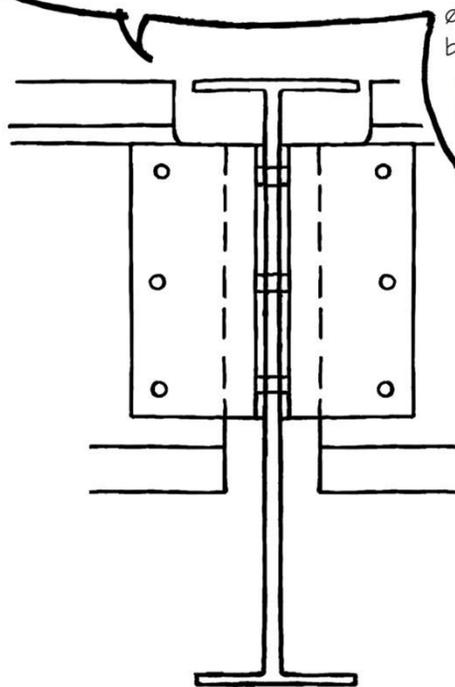


$\varnothing 5/8$ " x  $1\ 3/4$ " bolts (or 2  $1/4$ " )

This block contains a list of hardware components for the single channel connection. It includes two green bolts, two green washers, two yellow bolts, and two yellow washers. The bolts and washers are arranged in two rows, with the top row showing a bolt and washer, and the bottom row showing a bolt and washer.



TWO SINGLE CHANNELS TO SINGLE I-BEAM USING WEB ANGLE



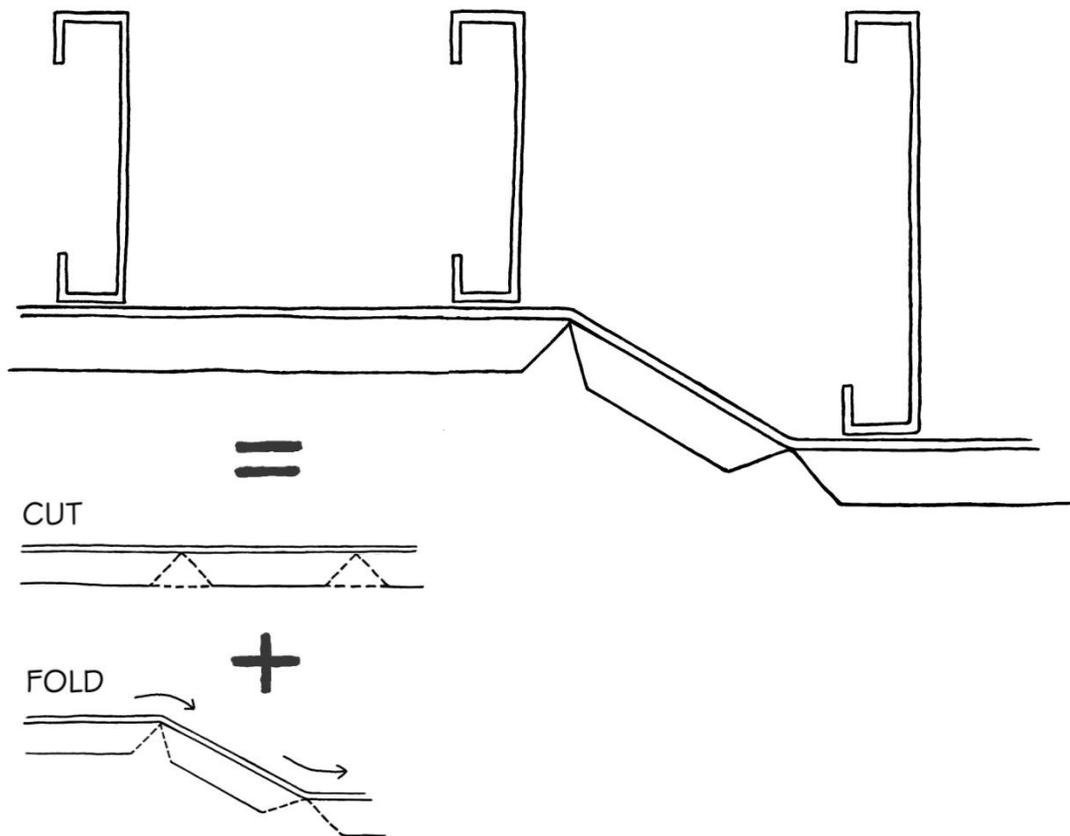
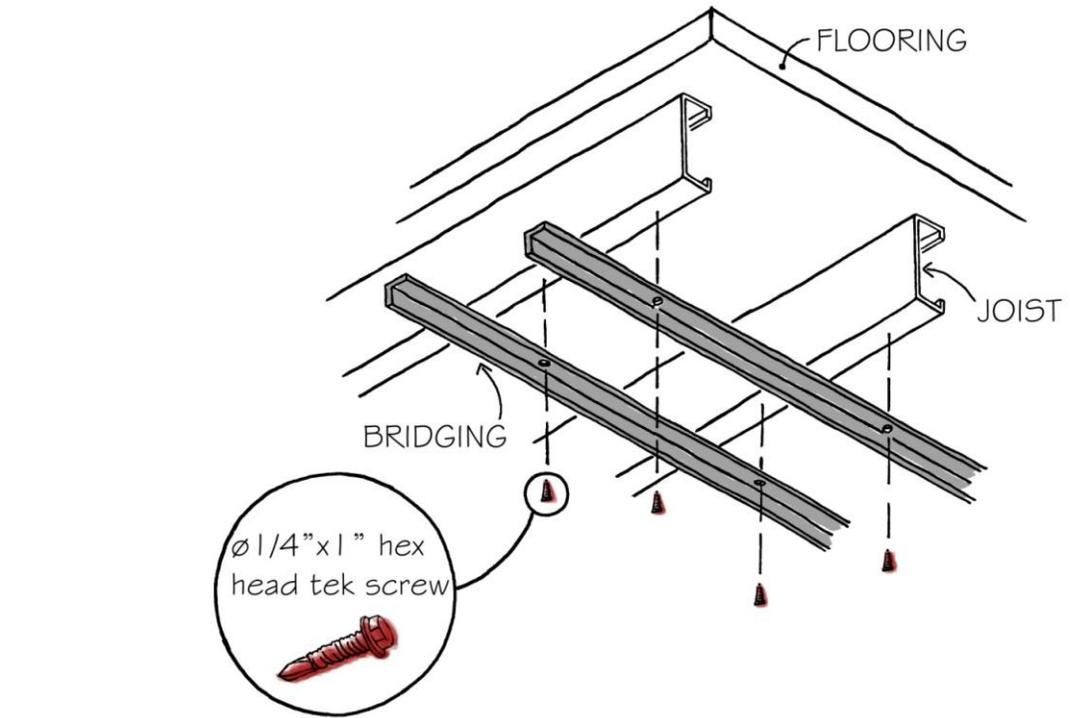
$\varnothing 5/8$ " x  $1\ 3/4$ " bolts (or 2  $1/4$ " )

This block contains a list of hardware components for the two channel connection. It includes two green bolts, two green washers, two yellow bolts, and two yellow washers. The bolts and washers are arranged in two rows, with the top row showing a bolt and washer, and the bottom row showing a bolt and washer.

# BRIDGING

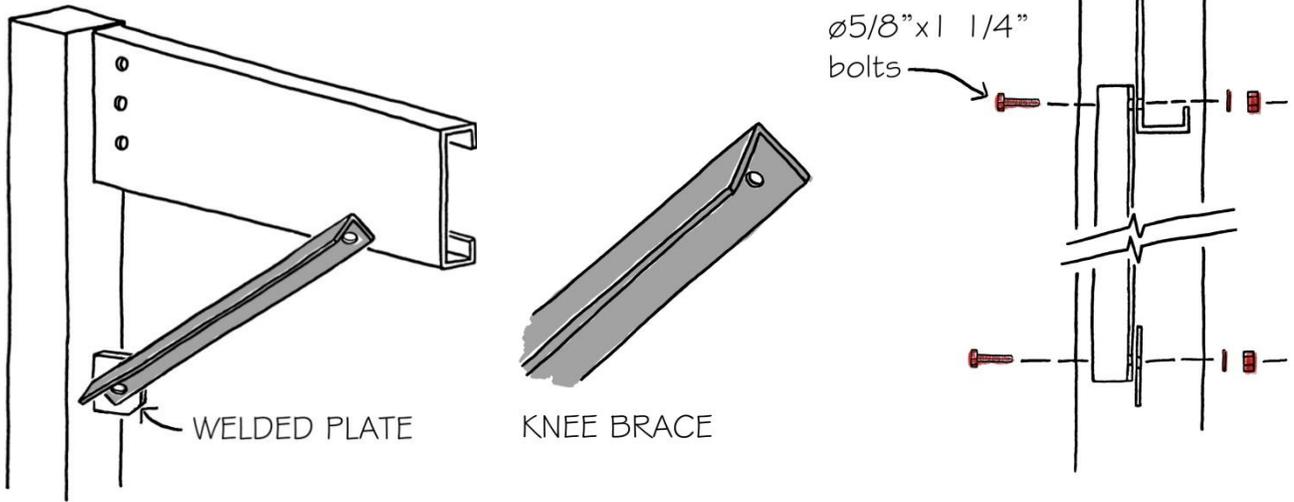


ASSEMBLE ACCORDING TO THE ORIENTATION INDICATED ON THE INSTALLATION PLAN

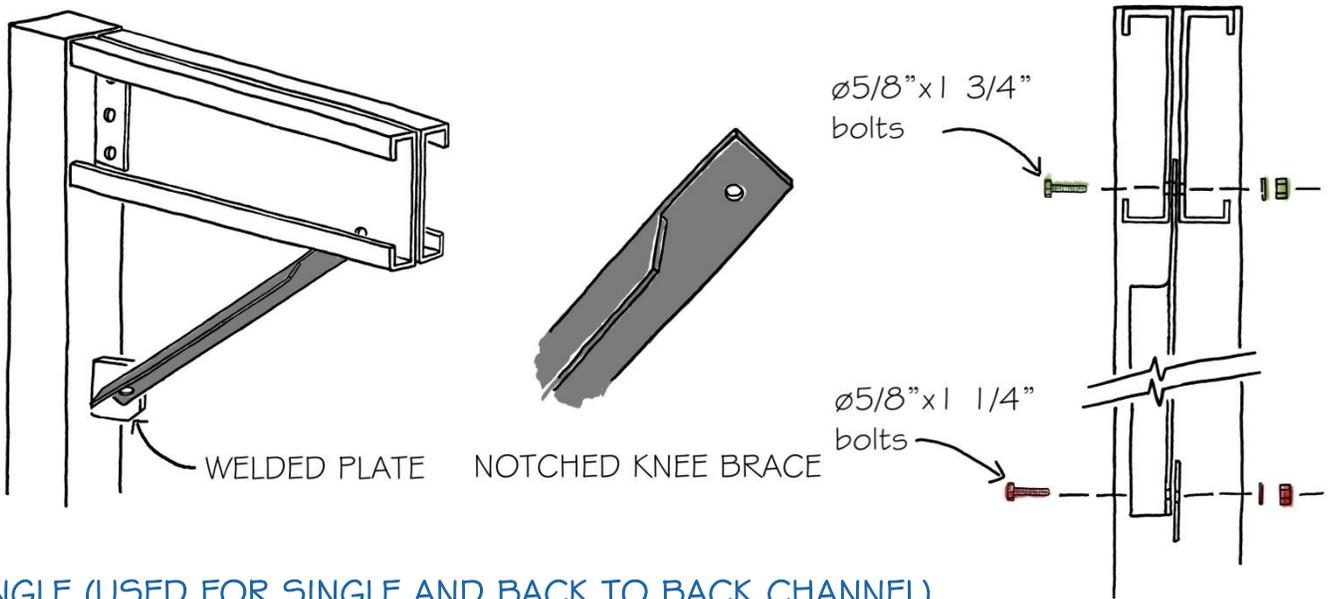


# STEP 4

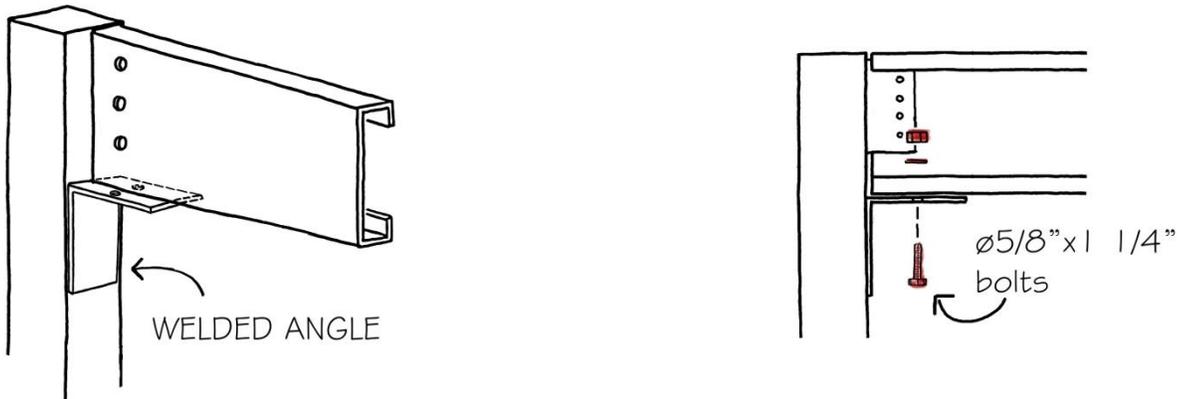
## BRACES (KNEE BRACE TO SINGLE CHANNEL)



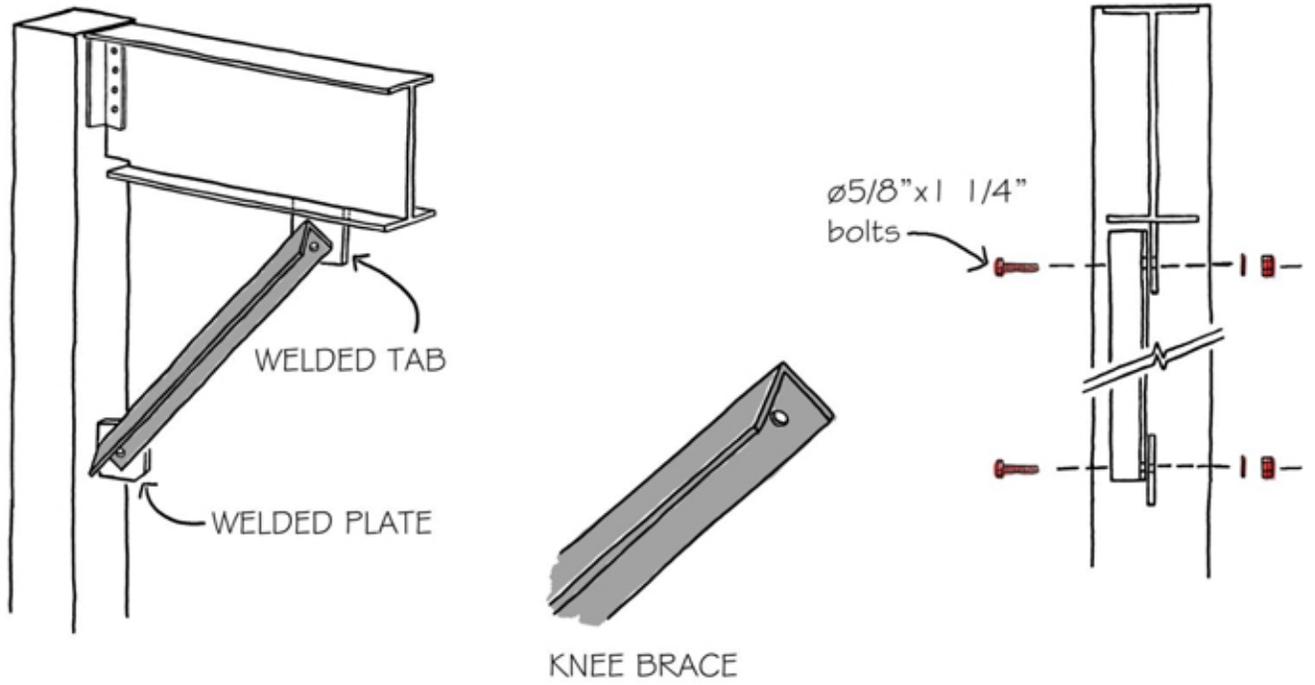
## BRACES (KNEE BRACE TO BACK TO BACK CHANNEL)



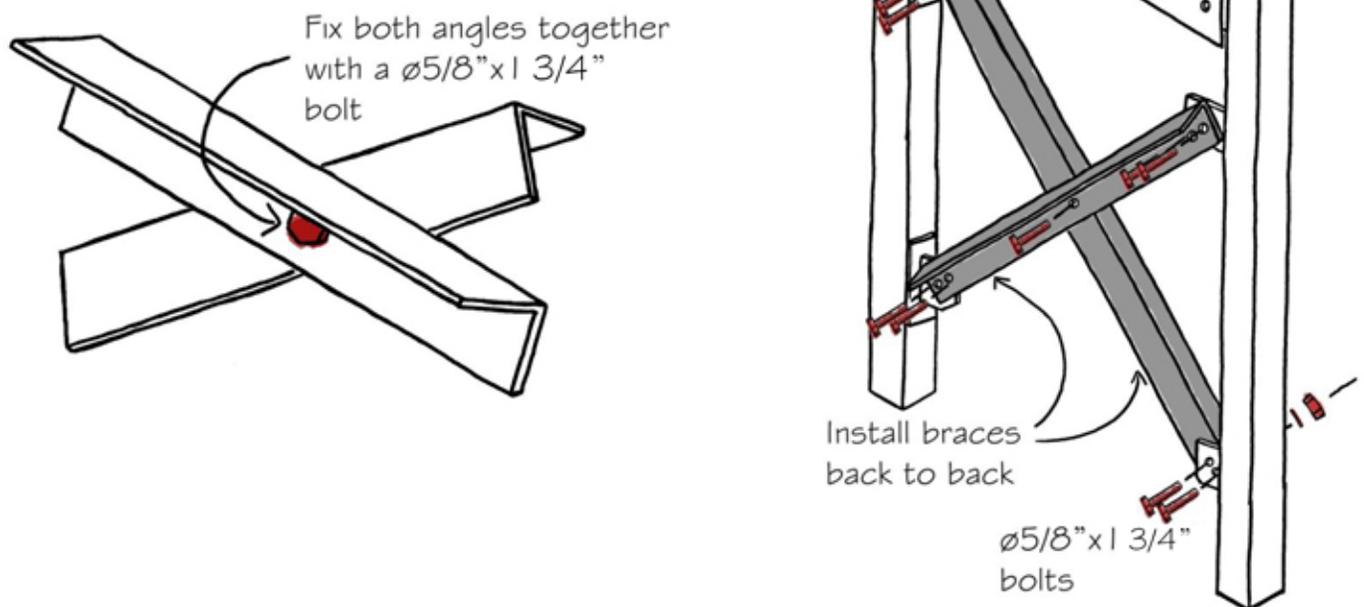
## ANGLE (USED FOR SINGLE AND BACK TO BACK CHANNEL)



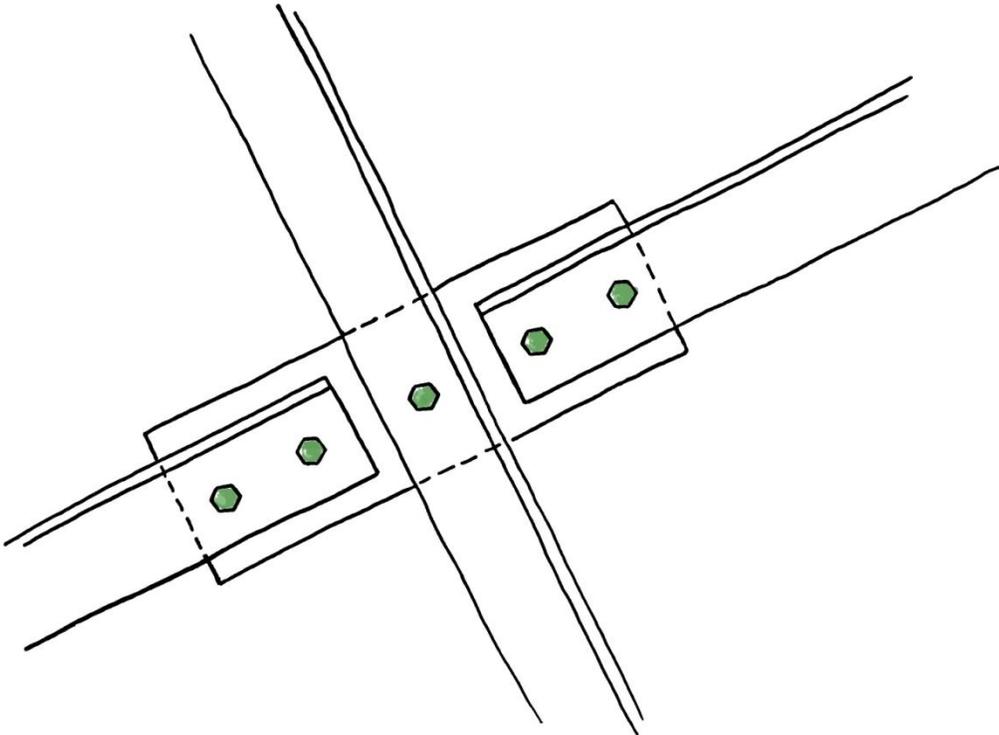
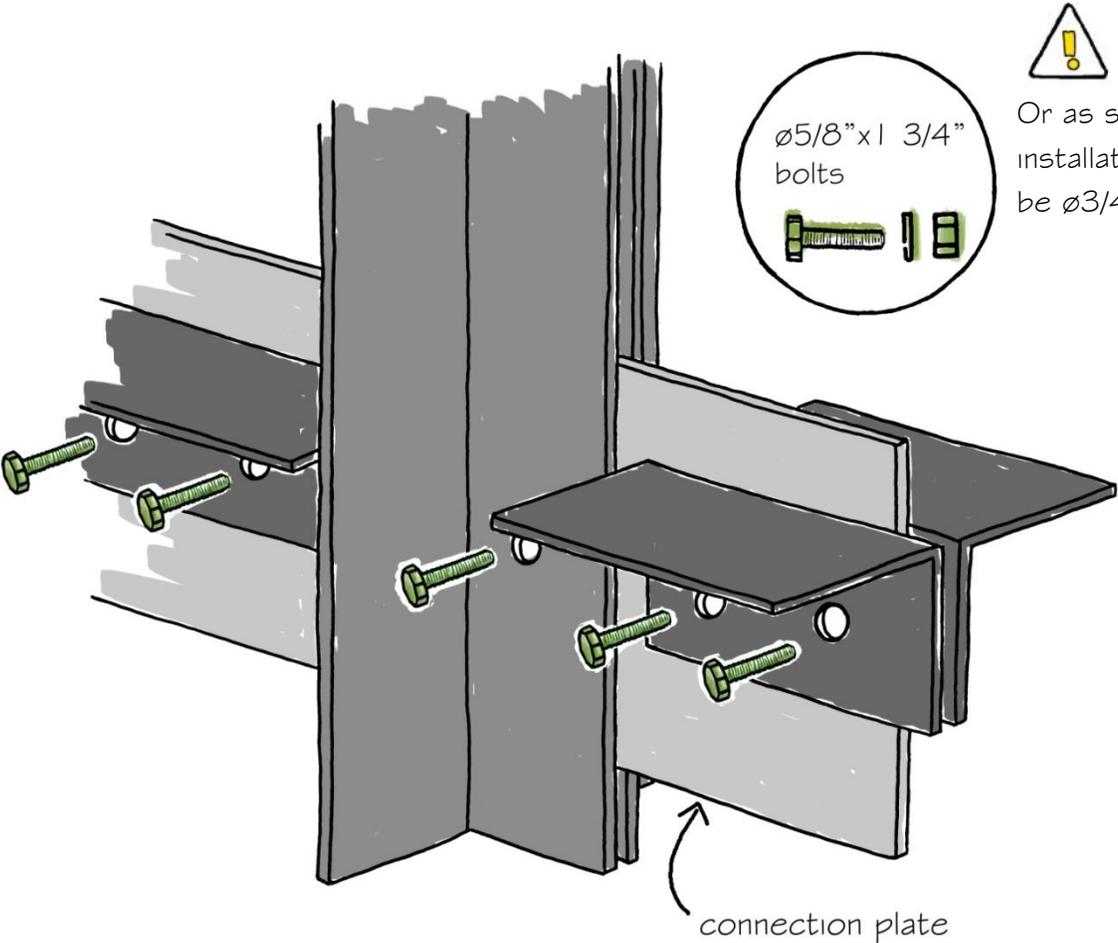
## BRACES (KNEE BRACE TO I-BEAM)



## BRACES (CROSS BRACE)

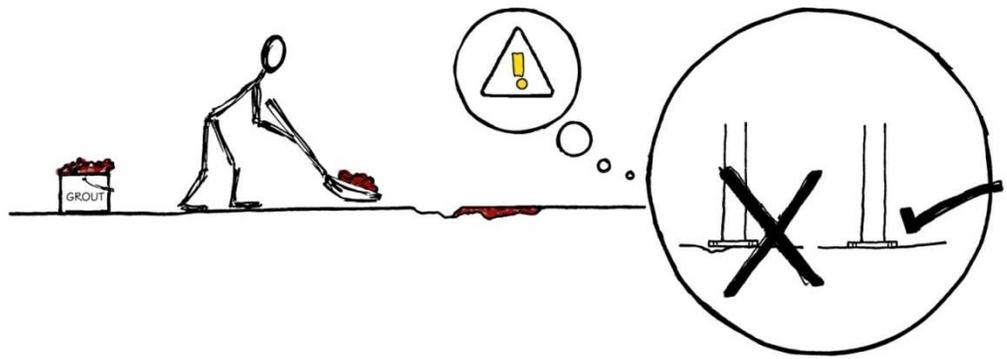


# BRACES (DOUBLE CROSS BRACE)

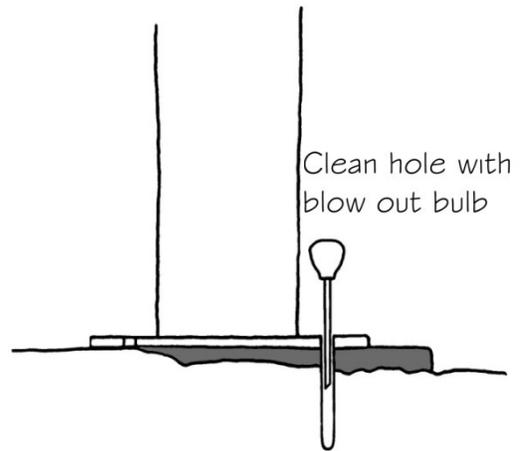
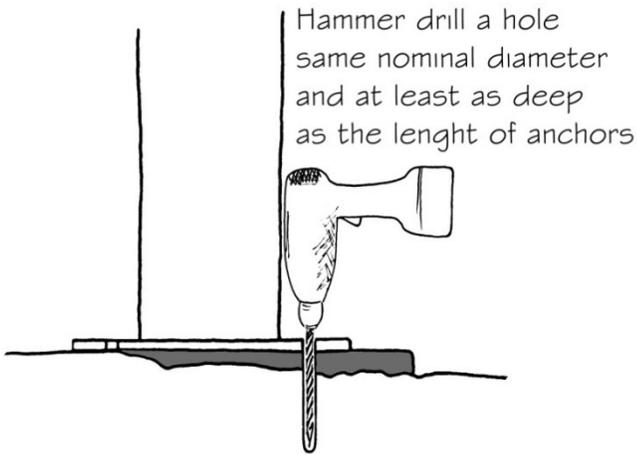


# STEP 5

## ANCHORING



FOR ADEQUATE ANCHORING CONDITIONS, THE ENTIRE SURFACE OF THE BASE PLATE MUST BE IN CONTACT WITH THE CONCRETE SLAB. WHEN CONCRETE SLABS ARE UNEVEN OR UNLEVEL, NON-SHRINK GROUT MUST BE USED TO FILL UNDER BASE PLATES. SHIM PLATES ARE NOT PERMITTED.



Drive the hilti bolt in the hole so that at least **6 threads** are below the top surface of fixture. Then tighten to the recommended torque value to achieve proper anchor setting

