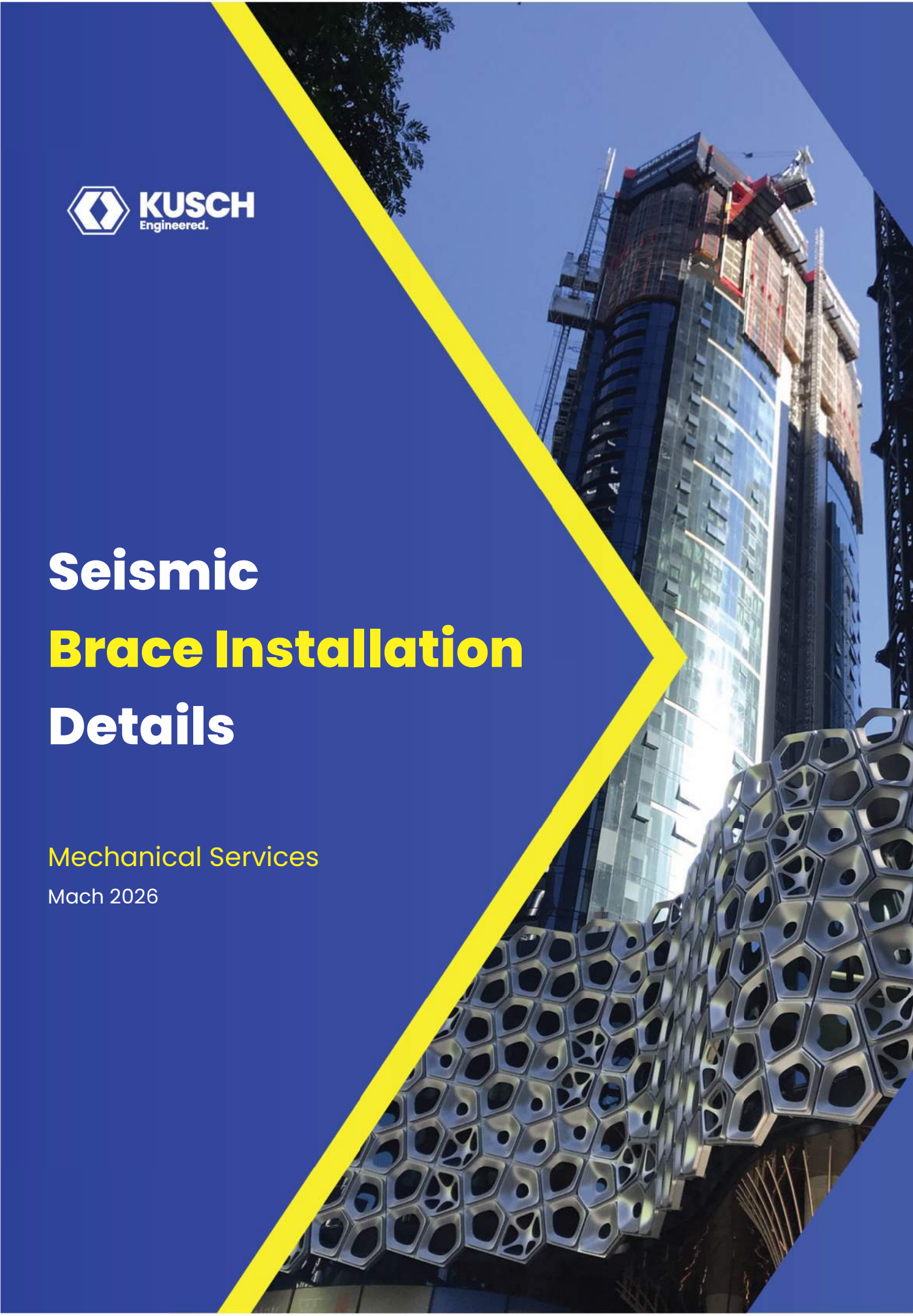




Seismic Brace Installation Details

Mechanical Services

Mach 2026



KUSCH engineers project-specific seismic solutions that minimise material use, reduce labour, and actually work when you're on site. Every solution is designed for compliance with AS1170.4 and AS5216, while reducing construction complexity. We support your team from concept to install - solving seismic, structural and buildability challenges directly on site. We design mechanical, electrical, fire, and hydraulic services, along with other non-structural elements.

We Deliver:



Brace-Free Seismic Solutions

KUSCH uses dynamic analysis to calculate how far your services will swing in an earthquake. This allows us to reduce the amount of bracing required on site - saving time, labour, and materials.



Braced Seismic Solutions

KUSCH designs efficient, code-compliant braced seismic systems tailored to your service layout. Our approach ensures optimal bracing placement while reducing unnecessary materials, installation time, and on-site complexity.



Services Support Design

We provide seismic and structural design of supports and fixings including:

- Concrete anchors to AS5216
- Shallow embedment requirements
- Anchoring to hollowcore, blockwork or timber
- Anchor schedules and fixing registers
- C1 & C2 seismic anchors
- Fire-rated service supports
- Supply of Seismic Bracing Materials
- Additional Structural Loads Mandated by the NCC: Wind, Thermal & Building Movement



BIM-Integrated Seismic Coordination

Our seismic designs are fully modelled in Revit, delivering:

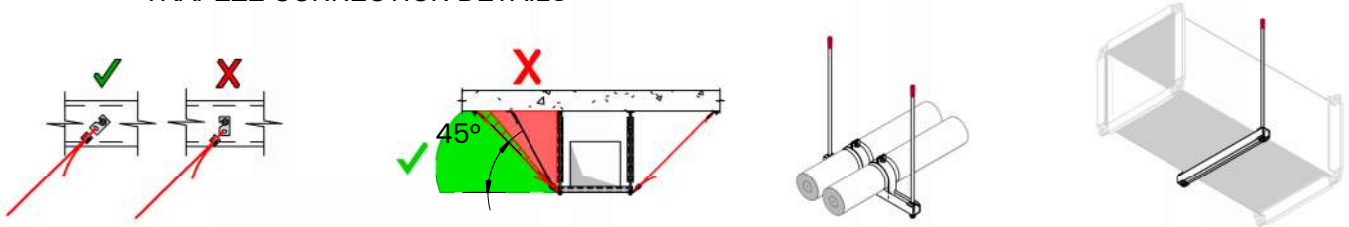
- Clash-free layouts
- Nested bill of materials with cut lengths
- Unique brace tags for QA
- Trimble points for precise pre-drilled anchor placement

This document sets out the desired installation methodology for our most common brace solutions.

1. TYPICAL INSTALLATION PRINCIPLES

PAGES 4 - 11

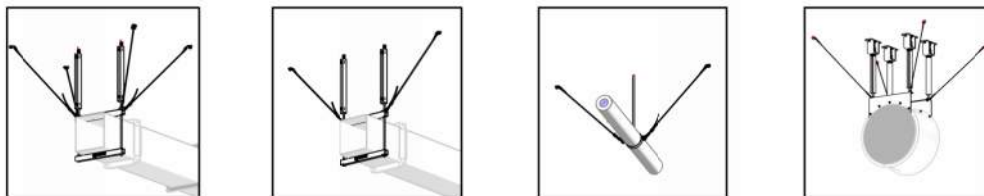
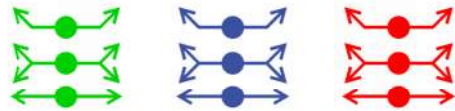
- INSTALLATION ANGLES
- CONNECTIONS TO PURLINS (HANGERS AND CABLES)
- JOINING CABLES
- TRAPEZE CONNECTION DETAILS



2. SEISMIC CABLE KITS

PAGES 12 - 21

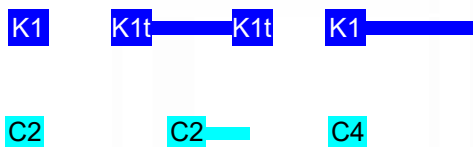
- TWO-WAY CABLE BRACES
- FOUR-WAY CABLE BRACES
- SPLIT FOUR-WAY CABLE BRACES
- FOUR-WAY CABLE BRACE TO FAN / FCU



3. STRUT POSTS – K1 & C2/4

PAGES 22 - 27

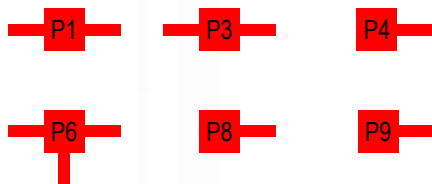
- SUPA STRUT AND 41mm STRUT
- 2-POST TRAPEZE AND SINGLE POST TRAPEZE



4. 41mm STRUT BRACES

PAGES 28 - 32

- CANTILEVER WALL BRACES
- BRACES AT WALL PENETRATIONS
- COLUMN CLAMPS
- TRAPEZE BRACES

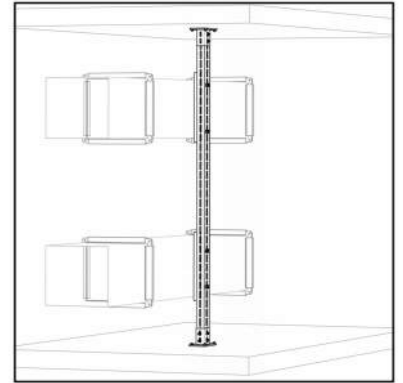
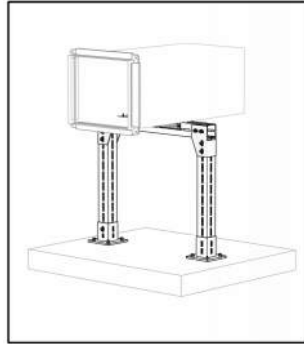


5. SUPA STRUT BRACES

PAGES 33 – 35

- CANTILEVER POSTS FROM SOFFIT / FLOOR AND FLOOR-TO-SOFFIT
- SUPA STRUT HURDLES / TRAPEZE
- FIXING DUCT TO SUPA STRUT
- FIXING PIPE TO SUPA STRUT

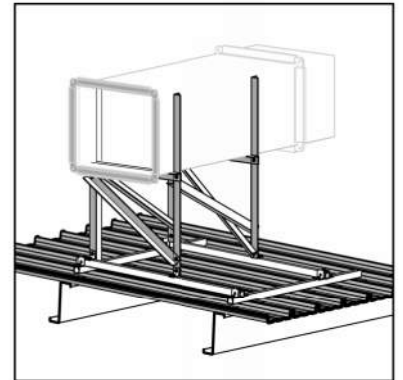
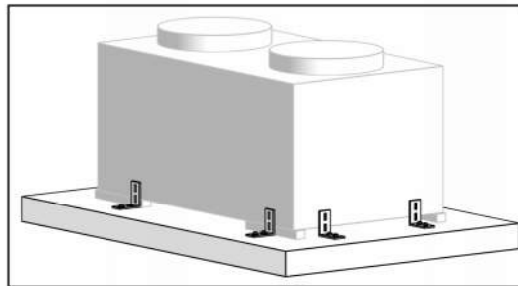
S50	F50	FS50	S80	S80
S80	F80	FS80	F80	F80
S100	F100	FS100		



6. MECHANICAL EQUIPMENT RESTRAINT

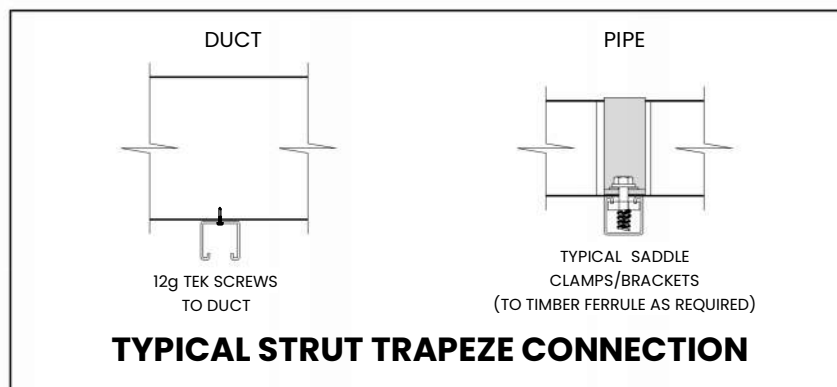
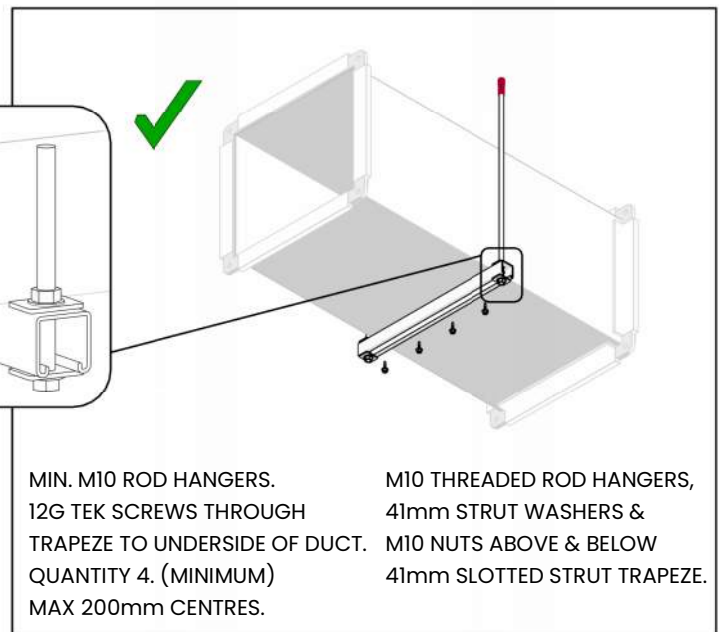
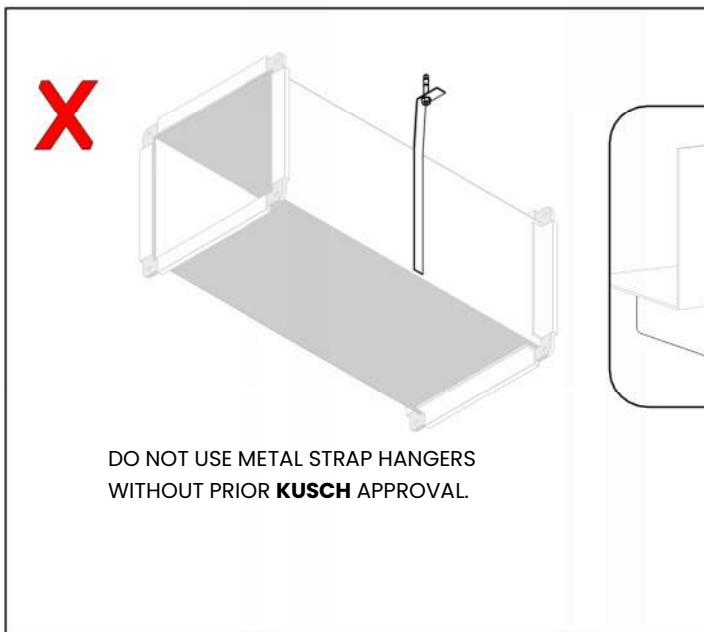
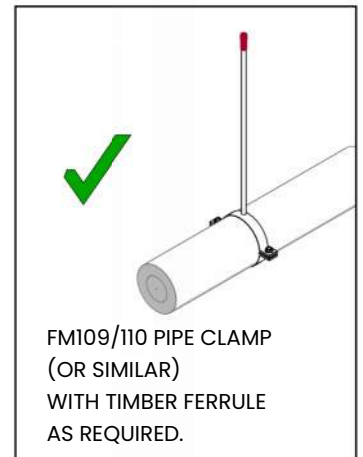
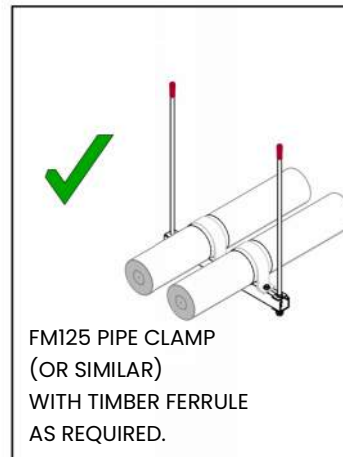
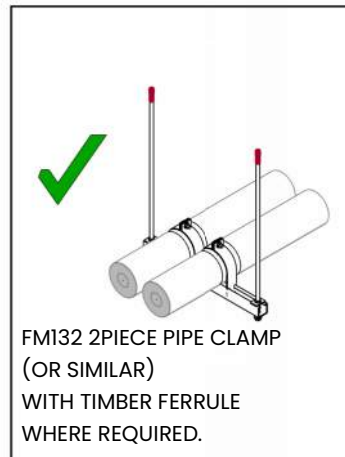
PAGES 36 – 37

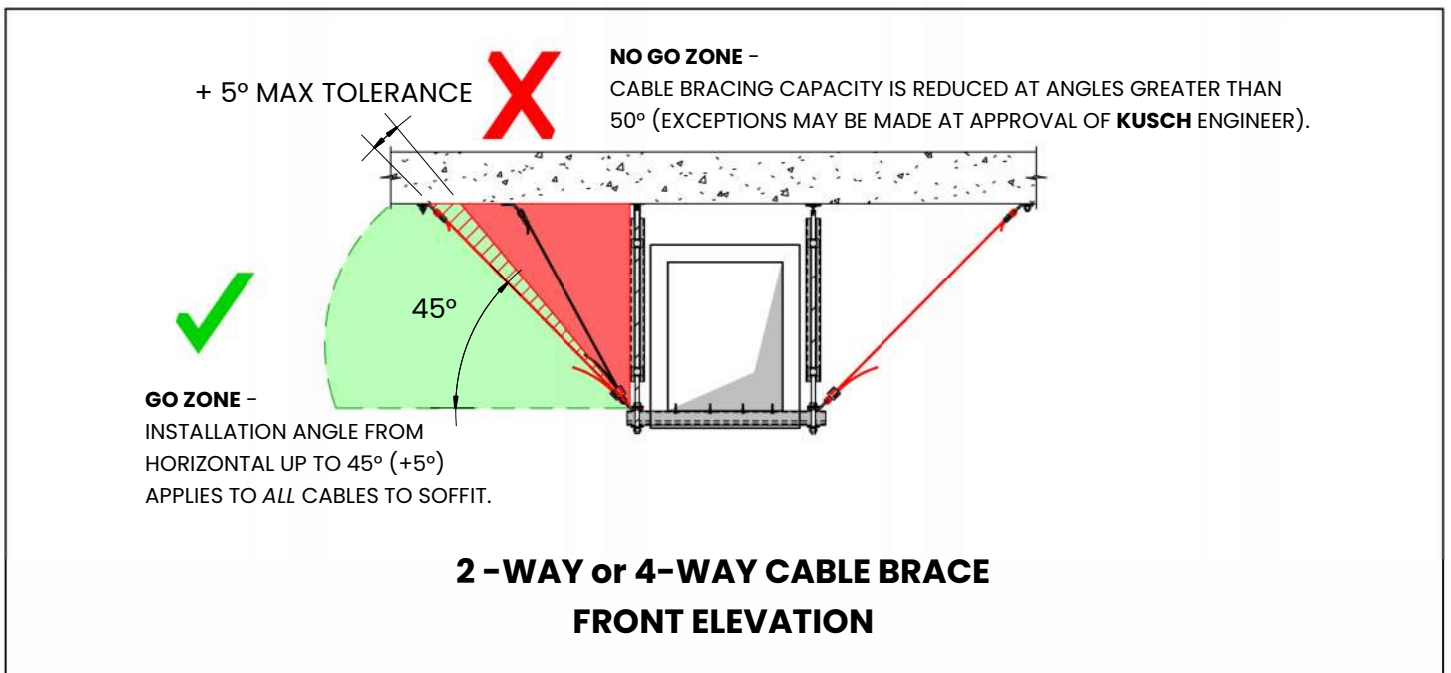
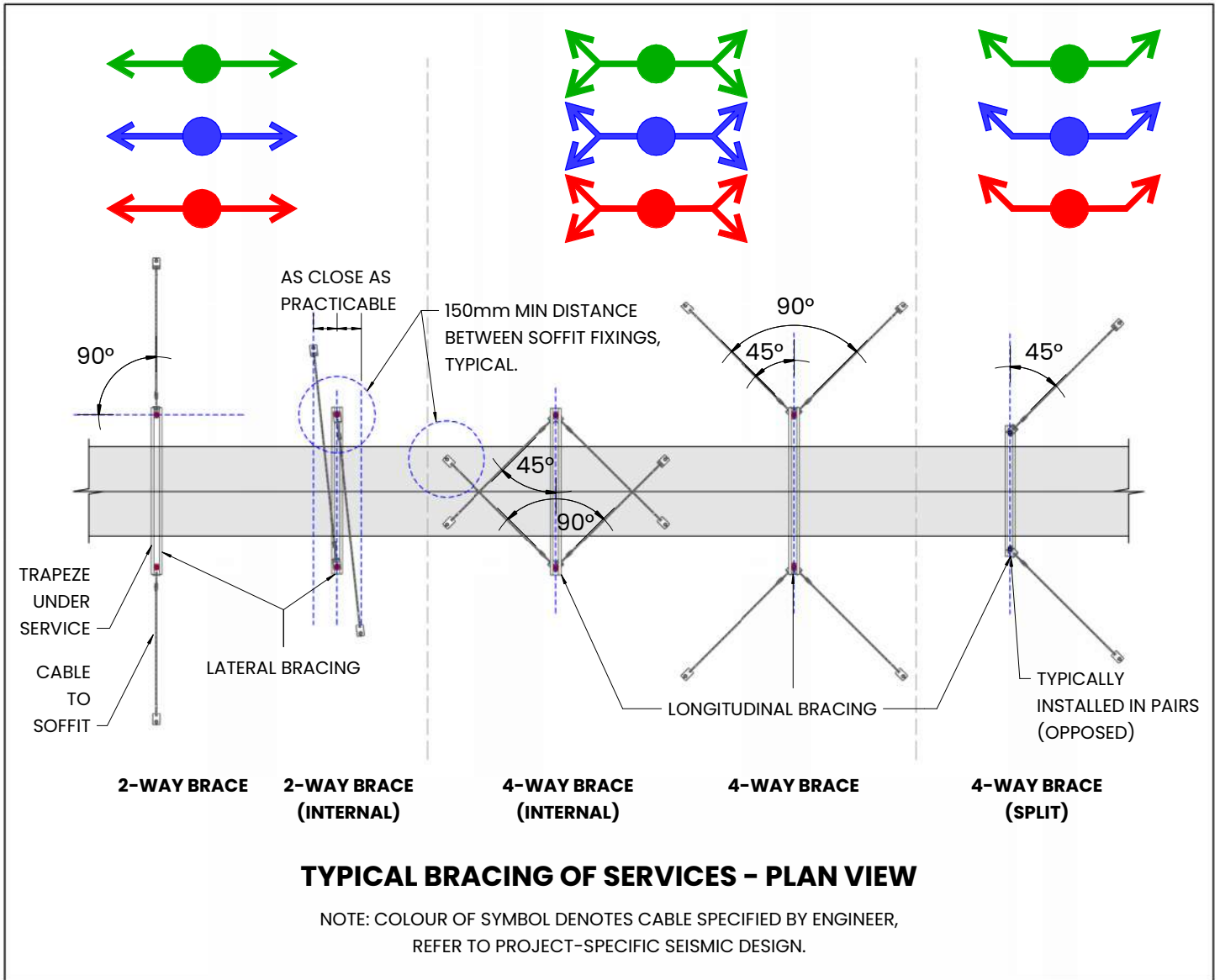
- FLOOR MOUNTED MECHANICAL EQUIPMENT
- ROOF MOUNTED MECHANICAL EQUIPMENT
- SEISMIC SNUBBERS
- TANK RESTRAINT



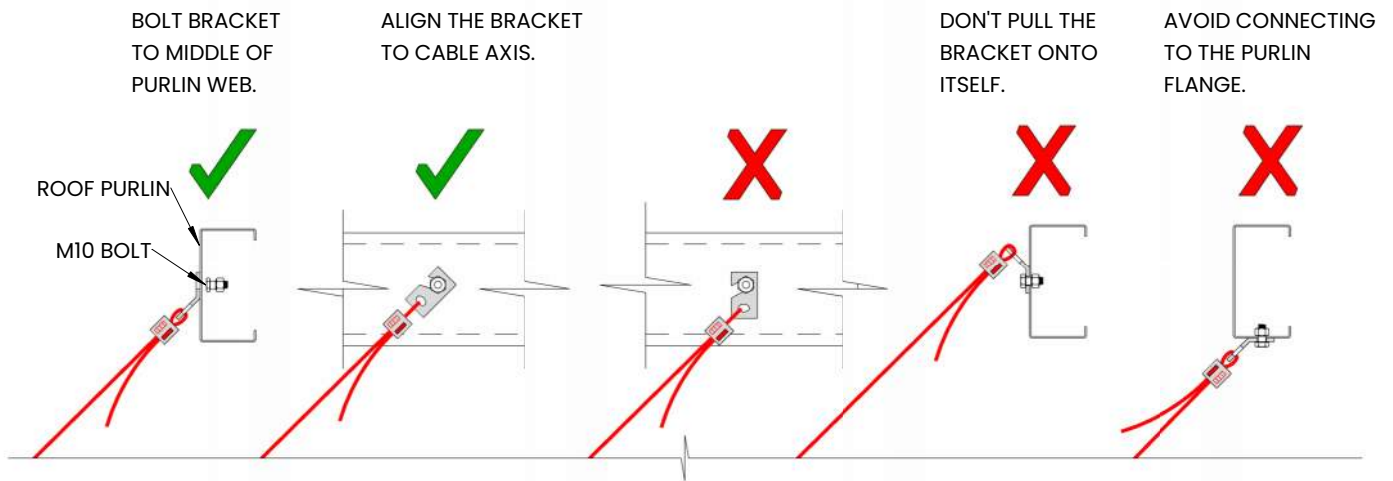
At every instance, use:

- Seismic rated concrete anchors as approved by **KUSCH**.
- 41mm strut washer and locking nut above *and* below trapeze.
- Stiffeners to rod as specified by **KUSCH**.
- M10 (minimum) rod hangers.

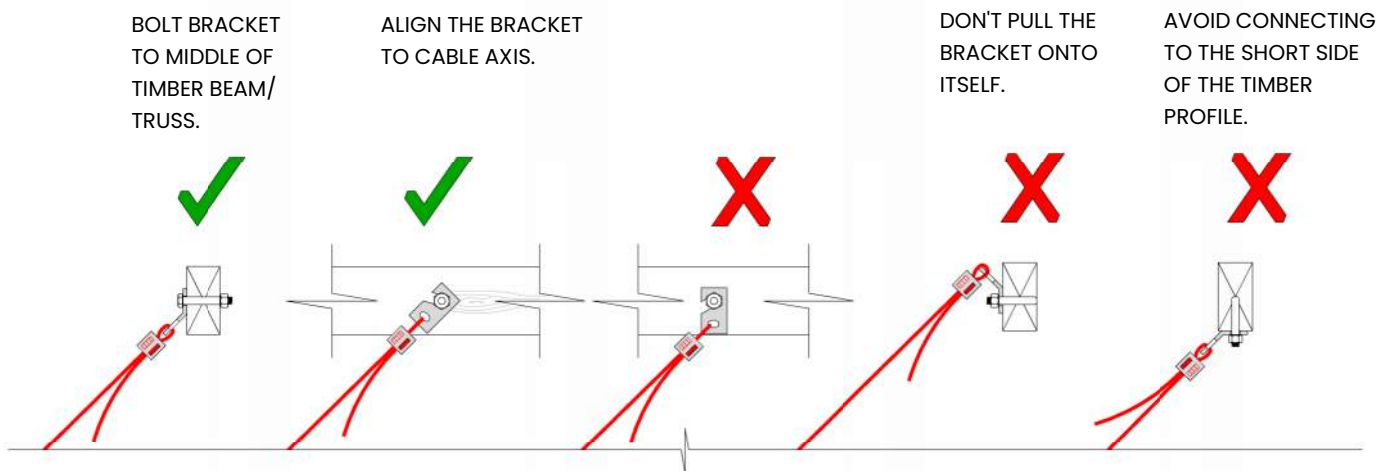




SEISMIC CABLE TO PURLIN CONNECTION DETAIL



SEISMIC CABLE TO TIMBER TRUSS CONNECTION DETAIL



IMPORTANT!



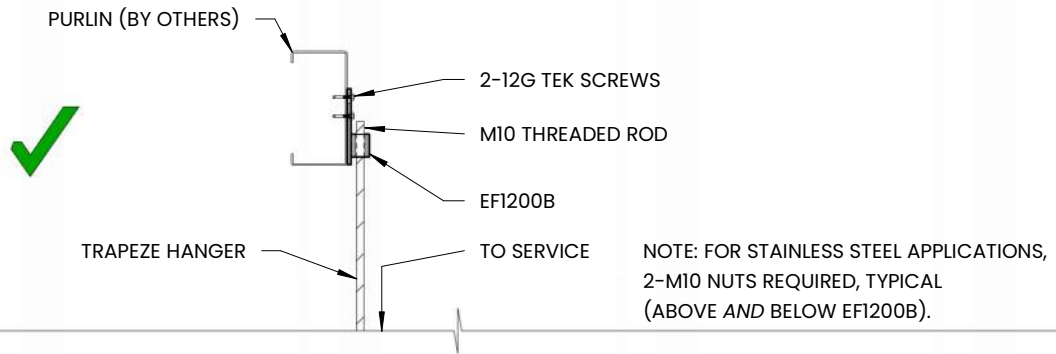
DO:

- HAND TIGHTEN CABLE USING ZIP-CLIP CABLE JOINER.
- ADJUST Zip-Clip CABLE JOINER USING RELEASE PINS IF REQUIRED.
- LEAVE A TAIL AT FREE END OF CABLE PASSING THROUGH Zip-Clip CABLE JOINER, MIN. 150mm.
- ALIGN 45° ANGLE BRACKETS AT EACH END SO THAT BOTH HOLES ON ANGLE BRACKETS ARE IN LINE WITH CABLE, AND CABLE IS PULLING ON NEAREST HOLE.
- USE ROD STIFFENERS AS SPECIFIED BY **KUSCH**.

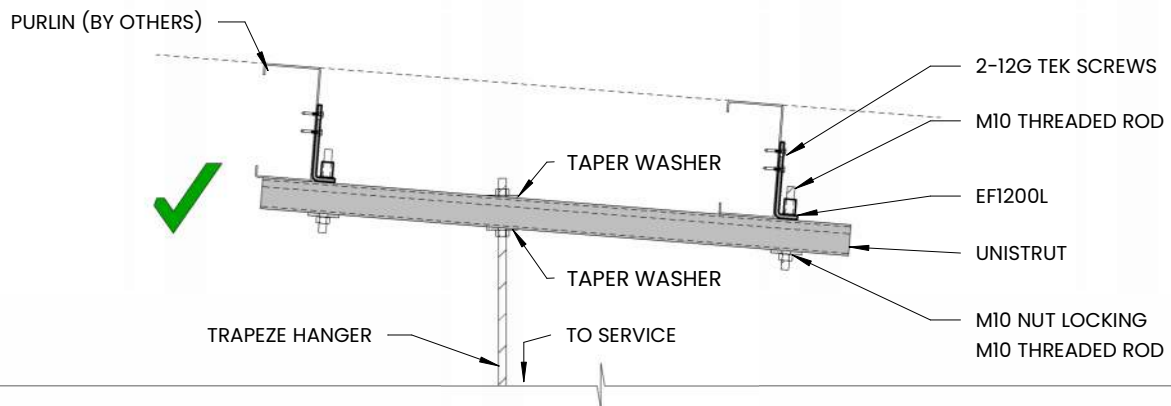
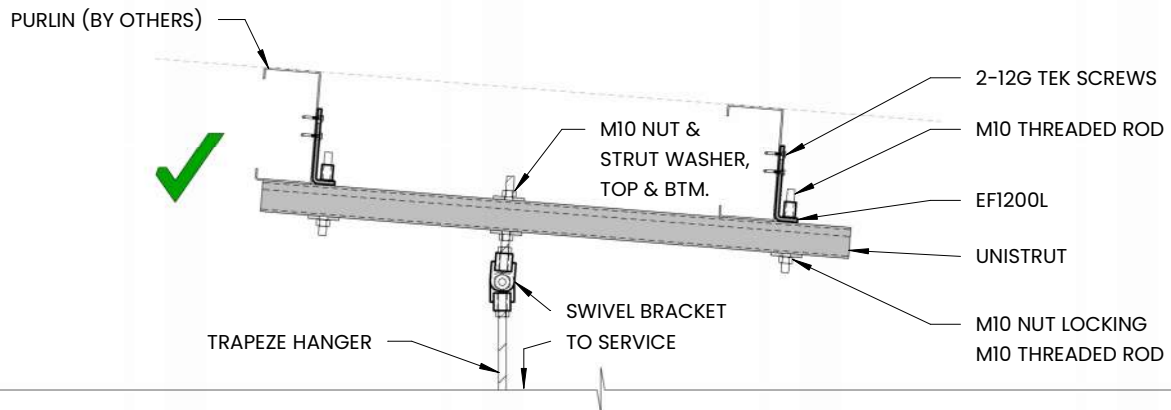
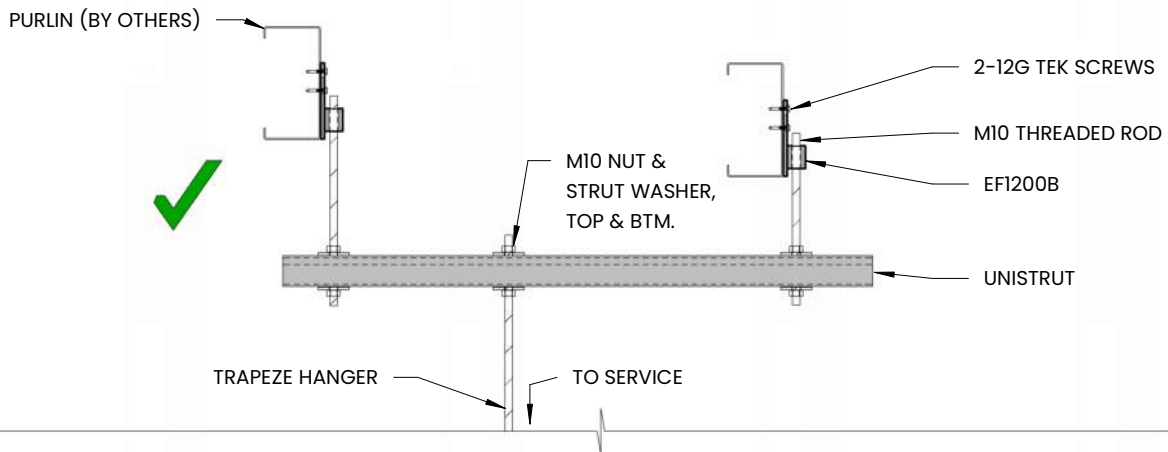
DO NOT:

- DO NOT ALLOW CABLE TO CONTACT ANY SERVICE, STRUCTURE, PLANT, HANGING ROD, BRACE ETC. ALONG ITS ENTIRE LENGTH.
- DO NOT ATTACH 2off OR MORE CABLES TO 1off SB /NR 45° ANGLE BRACKET.
- DO NOT OVER-TIGHTEN CABLE IN ABSENCE OF ROD-STIFFENER. IF HANGING ROD BUCKLES, THE CABLE CANNOT PROVIDE ADEQUATE RESTRAINT.
- DO NOT BOLT 45° BRACKETS TO PURLIN FLANGES.

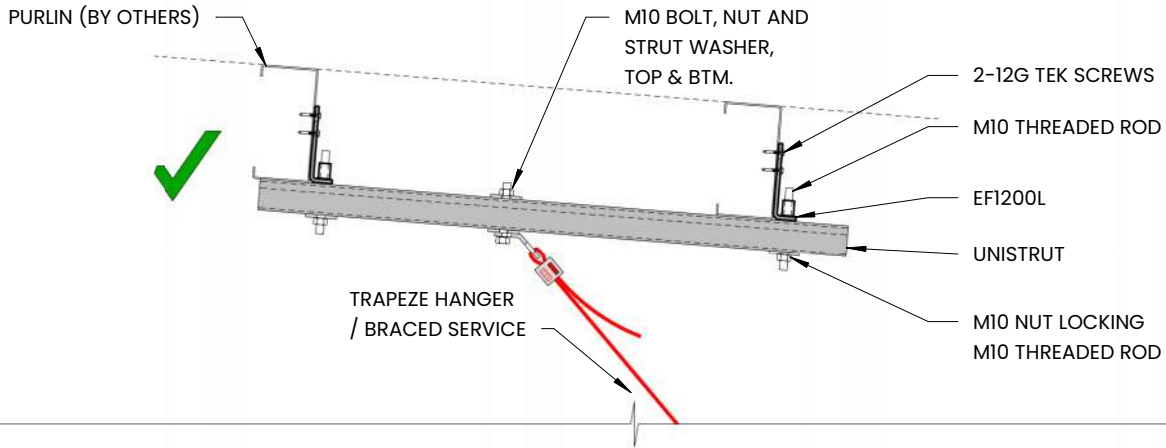
SERVICE HANGER DIRECTLY FROM PURLIN



WHERE SERVICE HANGER IS NOT DIRECTLY BELOW PURLIN



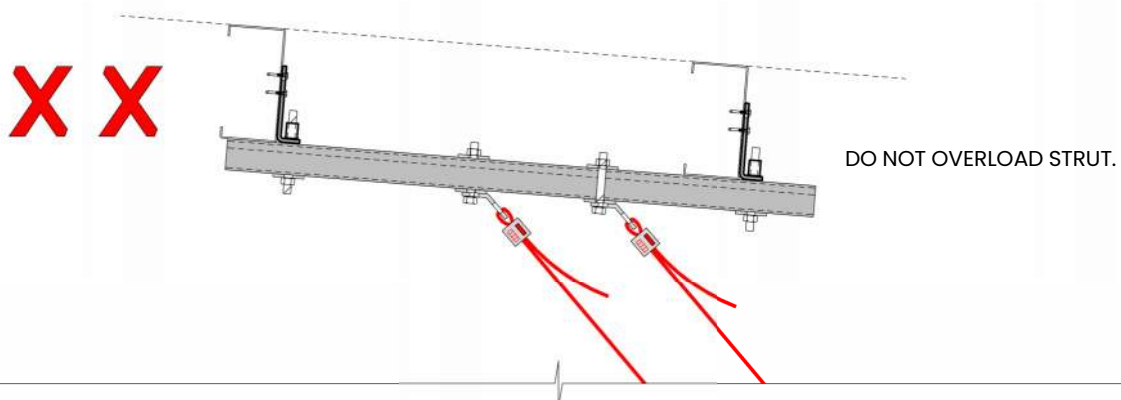
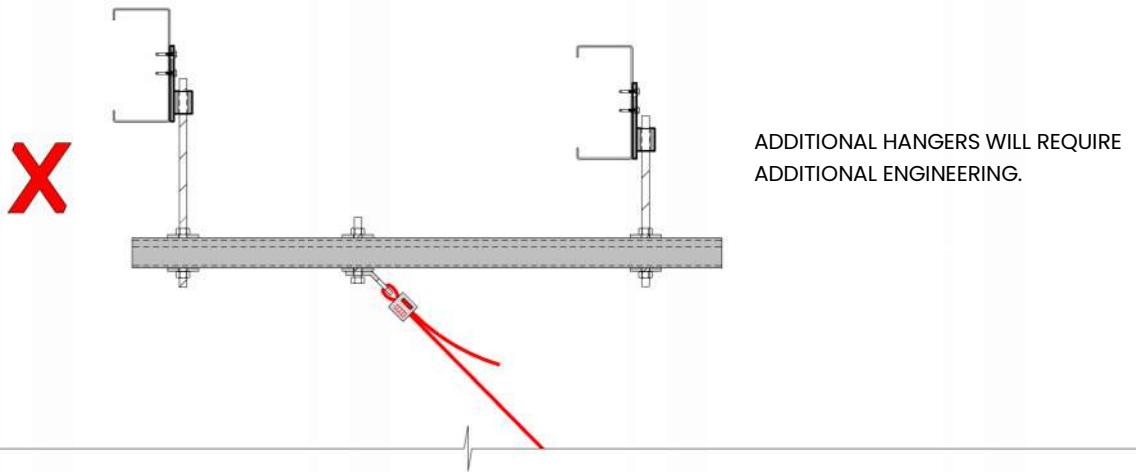
WHERE CABLE CONNECTION DIRECTLY TO PURLIN CANNOT BE ACHIEVED, FIX CABLE AS FOLLOWS



IMPORTANT NOTE:

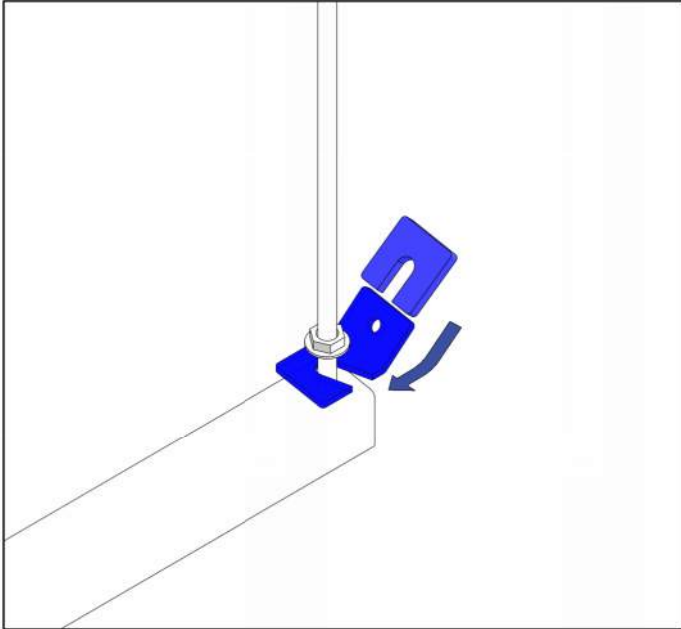
- Single Red Cable only per strut.
- Minimum 1.2mm thick Purlins.

Otherwise, bolting to purlins required using FM1026 & M10 bolts with Channel nut to strut, and 40x40x3 washer to purlin.

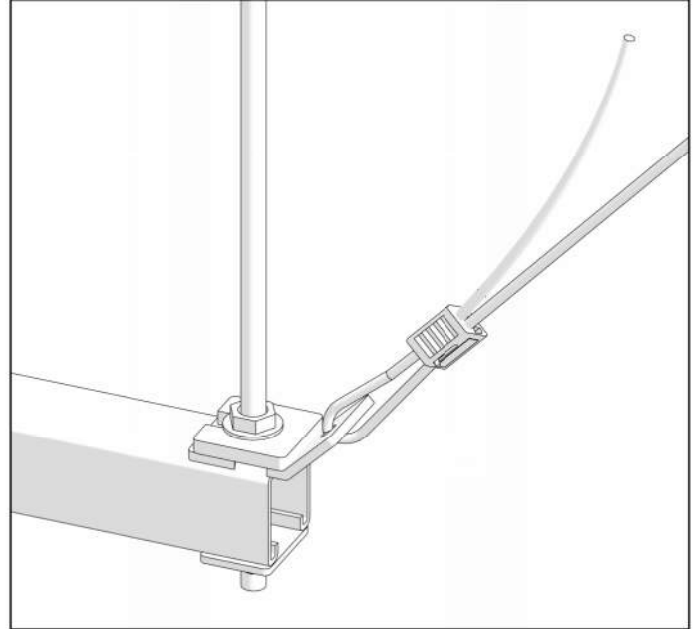


FIXING CABLE TO TYPICAL TRAPEZE

AT EACH CABLE LOCATION,
FIT LARGE PLATE SLOTTED HOLE WASHER IN THE ORIENTATION SHOWN.



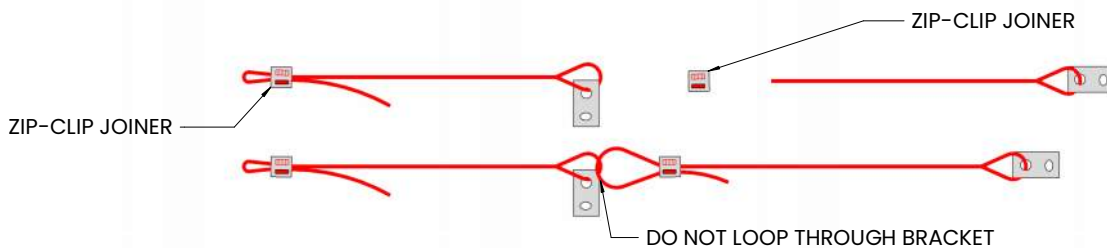
WIND UP TOP M10 NUT AND WASHER, PLACE CABLE BRACKET AND CABLE SLOTTED SQUARE WASHER AS SHOWN.



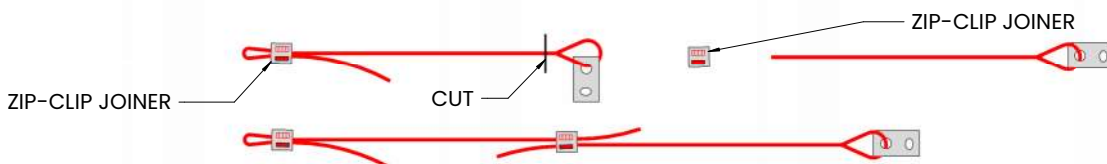
LOCK CABLE BRACKETS TO STRUT TRAPEZE WITH BOTH M10 NUT AND WASHER OVER, AND STRUT WASHER AND M10 NUT UNDER. THEN TENSION CABLES AS PER MANUFACTURERS INSTALLATION SPECIFICATIONS.





CABLES MAY BE JOINED TO ACQUIRE GAIN THE REQUIRED LENGTH BY FOLLOWING EITHER OF THESE METHODS





OPTION 1: ELIMINATE BRACKET AND JOIN LOOP-TO-LOOP



OPTION 2: ELIMINATE BRACKET, REMOVE FIXED LOOP WITH WIRE CUTTERS AND JOIN WITH ZIP-CLIP JOINER



 ZIP-CLIP SEISMIC RATED BRACE SCHEDULE C1 ANCHORS Brace Angle MAX 45°					
BRACE SYMBOL	Zip-Clip Cable Type	DEWALT Slab Connection	ICCONS Thru-bolt Ultra Slab Connection	HILTI HST4	ICCONS FM753 Slab Connection
	RED (2mm)	M10x90 PTB-ETA1-PRO	M10x90 Thru-bolt Ultra	M10x90 HST4	M10x90 ICCONS-FM753
	BLUE (3mm)		M12x140 Thru-bolt Ultra	M10x90 HST4	M10x90 ICCONS-FM753
	GREEN/YELLOW (4mm)		M12x140 Thru-bolt Ultra	M12x115 HST4	M12x110 ICCONS-FM753

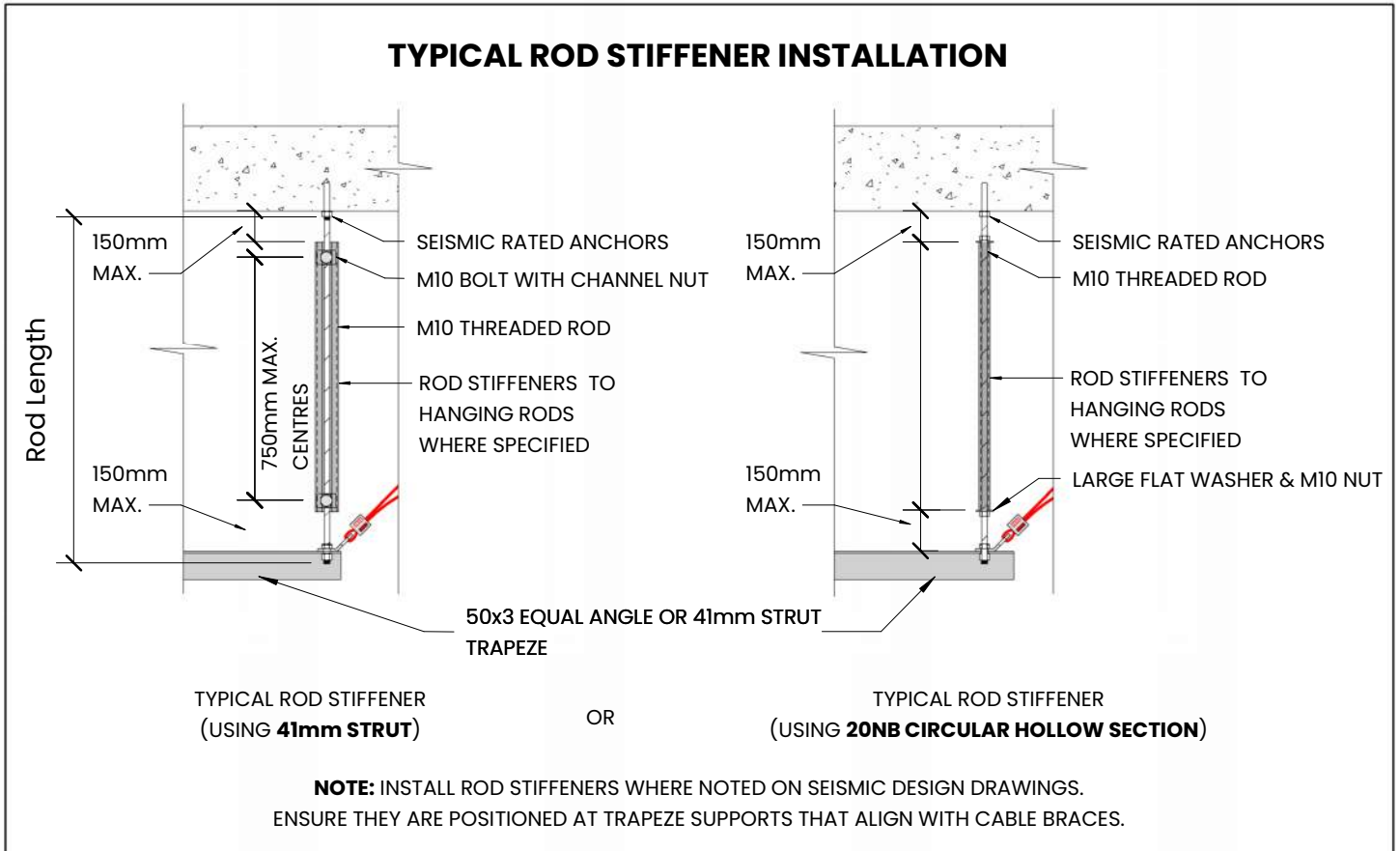
 ZIP-CLIP SEISMIC RATED BRACE SCHEDULE C2 ANCHORS Brace Angle MAX 45°				
Brace Symbol	Zip-Clip Cable Type	HILTI Slab Connection	ICCONS Thru-bolt Ultra Slab Connection	ICCONS FM753 Slab Connection
	RED (2mm)	M10x90 HST4	M10x90 Thru-bolt Ultra	M10x90 ICCONS-FM753
	BLUE (3mm)	M10x90 HST4	M12x140 Thru-bolt Ultra	M10x90 ICCONS-FM753
	GREEN/YELLOW (4mm)	M12x115 HST4	M12x140 Thru-bolt Ultra	M12x110 ICCONS-FM753

USING M12x110 ICCONS FM753 FOR A BLUE KIT REQUIRES A SEPARATE PURCHASE OF AN ANGLE BRACKET WITH A 13mm DIAMETER HOLE.

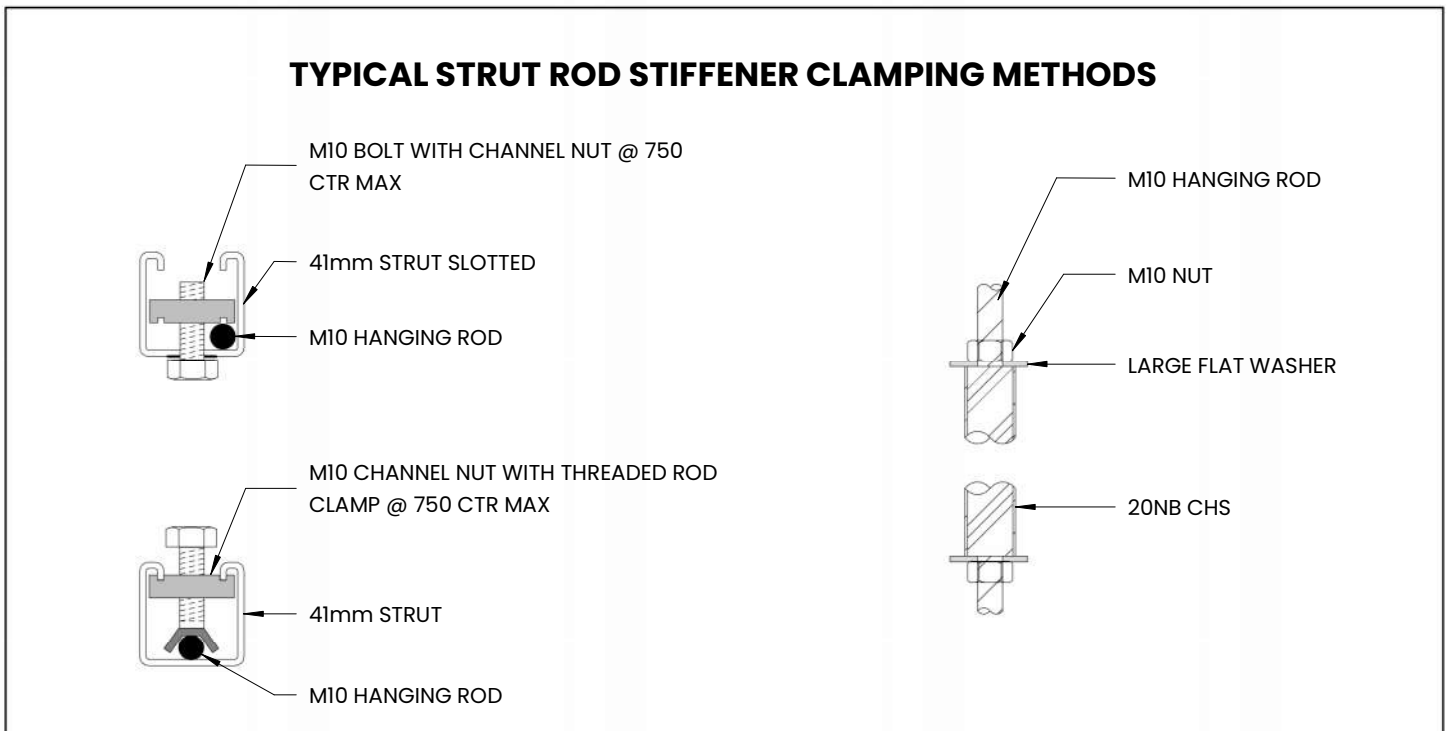
C2 Anchors are usually required in importance level 4 (II4) buildings.

Please contact **KUSCH** for clarification if you are unsure whether C1 or C2 anchors are required.

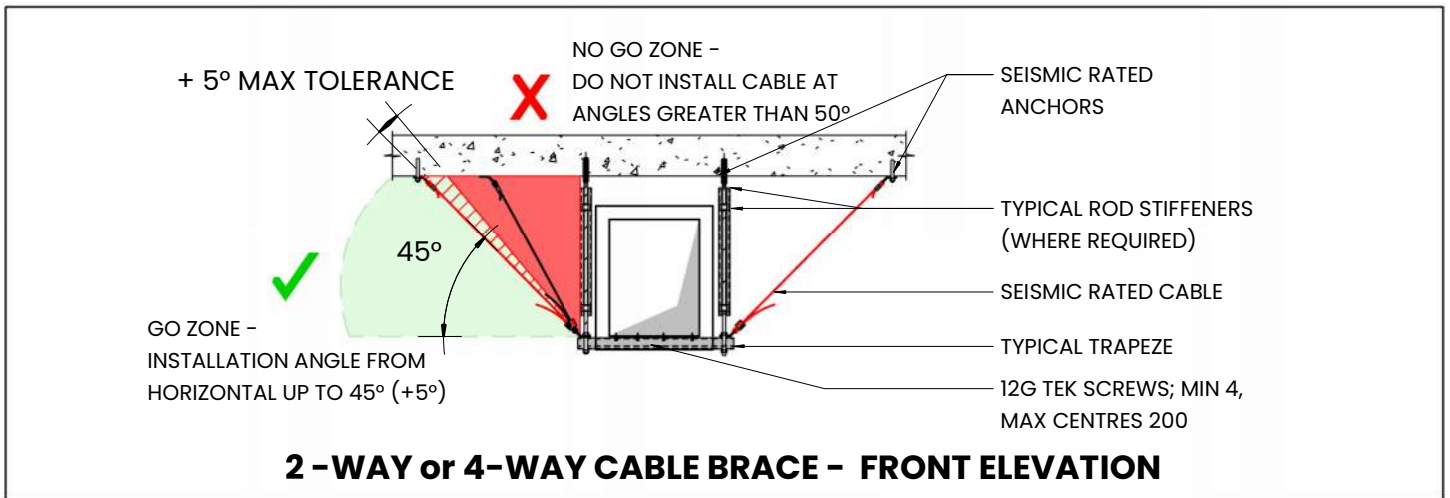
If you would like to use an anchor not listed above, please contact **KUSCH** and we can assess the anchor to determine it's suitability.



Rod Stiffeners required > 750mm in IL4 buildings. Otherwise, required as specified. Contact **KUSCH** for removal on a case by case basis once your hanging rod lengths are confirmed.

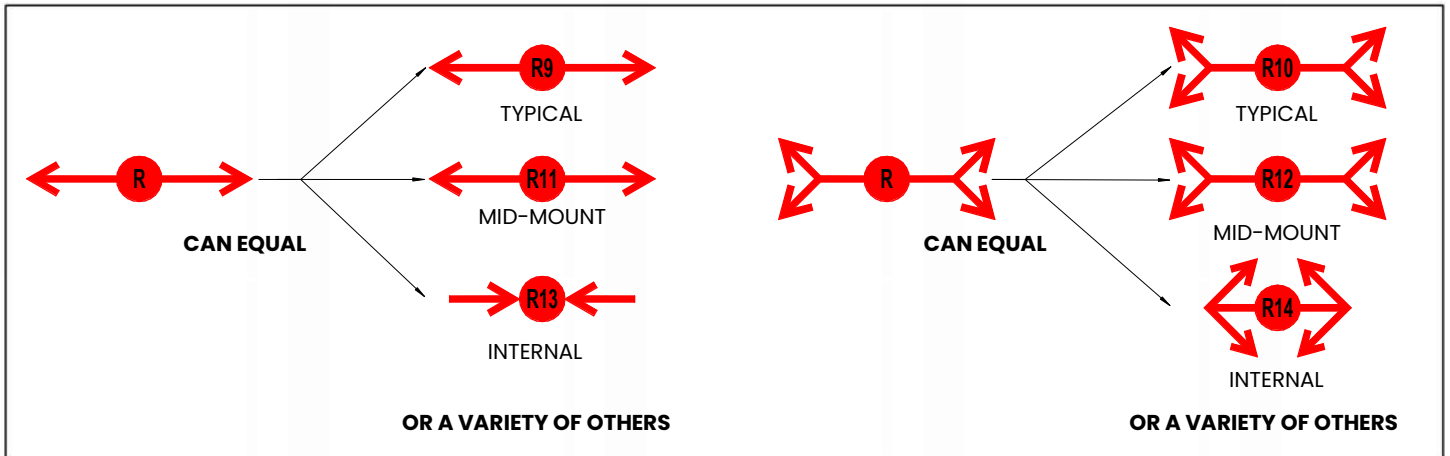


PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE DETAILS WITHIN SECTION 1 TO ACHIEVE OPTIMAL CAPACITY FROM CABLES.



The seismic engineering design may specify 2-way cable braces, these can be **swapped** for variations of a typical 2-way cable trapeze to allow clearance to adjacent services.

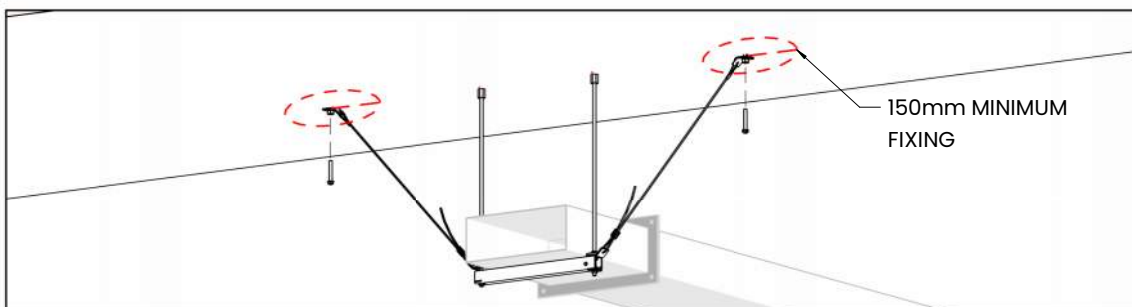
HOW TO APPLY ALTERNATIVE CABLE BRACE TYPES.



TWO-WAY CABLE KITS OF THE SAME KIT COLOUR ARE INTERCHANGEABLE WITH THESE CONFIGURATIONS: TYPICAL, MID-MOUNT, MID-MOUNT INTERNAL.

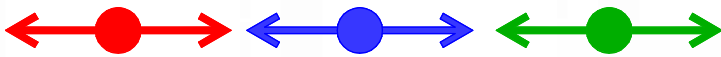
FOUR-WAY CABLE KITS OF THE SAME KIT COLOUR ARE INTERCHANGEABLE WITH THESE CONFIGURATIONS: TYPICAL, MID-MOUNT, MID-MOUNT INTERNAL.

CLEARANCE AROUND ANCHORS



CLEARANCE TO ANCHORS - 150mm CLEARANCE AROUND ANCHORS

PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE DETAILS WITHIN SECTION 1 TO ACHIEVE OPTIMAL CAPACITY FROM CABLES.



COLOURS DENOTE CABLE SPECIFIED BY SEISMIC DESIGN ENGINEER

TYPICAL 2-WAY (DUCT)	SCHEDULE	
	TYPE	R9, B9 or G9
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 2 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	2
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 2 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE SPECIFIED BY KUSCH
	ROD STIFFENER FIXINGS	@ 700mm CTS. (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	LENGTH VARIES
	STRUT WASHER	4
	M10 HEXNUT	4
	12g TEK SCREWS	MIN Qty: 4; MAX 200mm CTS.

TYPICAL 2-WAY CABLE BRACE **ALTERNATIVE**. THESE ALLOW CABLES TO CLEAR ADJACENT SERVICES.
OPTION TO ORIENT CABLES INTERNALLY, ALLOW 150mm MIN. CLEARANCE BETWEEN ANCHORS, FIXING TO DUCT WITH TEK SCREWS THROUGH TOP AND BOTTOM TRAPEZE.

2-WAY MID-MOUNT (DUCT)	SCHEDULE	
 	TYPE	(R11, B11 or G11) OR (R13, B13 or G13)
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 2 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	2
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 2 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE SPECIFIED BY KUSCH
	ROD STIFFENER FIXINGS	@ 700mm CTS. (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	LENGTH VARIES (x 2)
	STRUT WASHER	8
	M10 HEXNUT	8
	12g Tek Screws	MIN Qty: 8; MAX 200mm CTS.

PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE DETAILS WITHIN SECTION 1 TO ACHIEVE OPTIMAL CAPACITY FROM CABLES.



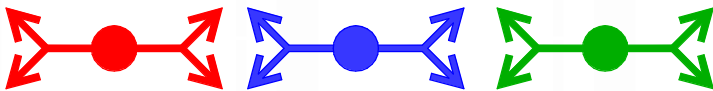
TYPICAL 2-WAY CABLE BRACE. THESE ALLOW PIPES TO SHARE GRAVITY SUPPORT.

OPTION TO ORIENT CABLES INTERNALLY, ALLOW 150mm MIN. CLEARANCE BETWEEN ANCHORS.

TYPICAL 2-WAY TRAPEZE (PIPE)	SCHEDULE	
<p>R15</p> <p>R17</p>	TYPE	(R15, B15 or G15) OR (R17, B17 or G17)
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 2 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	2
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 2 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE SPECIFIED BY KUSCH
	ROD STIFFENER FIXINGS	@ 700mm CTS. (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	LENGTH VARIES
	STRUT WASHER	4
	M10 HEXNUT	4
	12g Tek Screws	N/A PIPE FIXED TO TRAPEZE WITH FM132 OR FM125

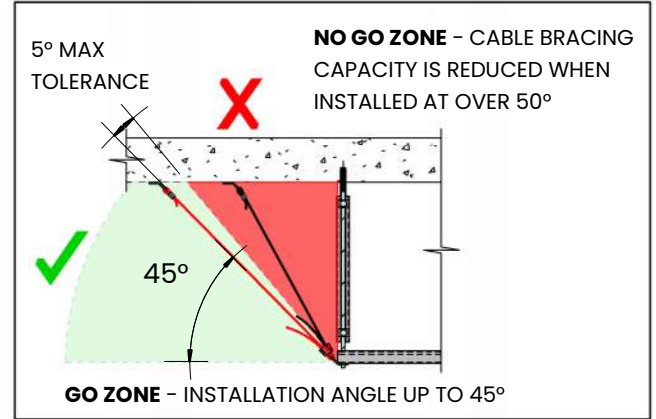
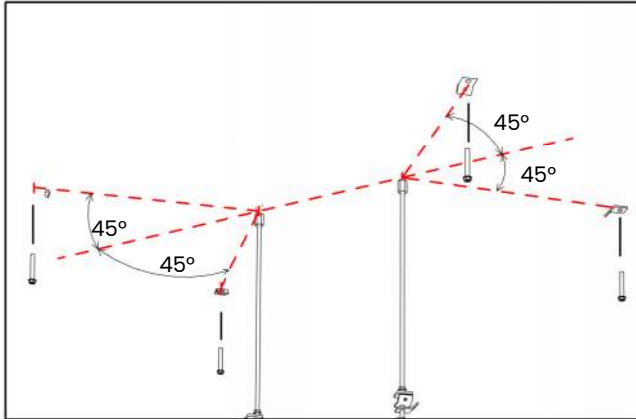
TYPICAL 2-WAY (PIPE)	SCHEDULE	
<p>R19</p> <p>PREFERRED</p> <p>OPTION - LOCK CABLES AT CLIP NUT (OVER).</p>	TYPE	R19, B19 or G19
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 2 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	2
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 1 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE SPECIFIED BY KUSCH
	ROD STIFFENER FIXINGS	@ 700mm CTS (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	N/A
	STRUT WASHER	N/A
	M10 HEXNUT	1
	12g Tek Screws	N/A

PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE DETAILS WITHIN SECTION 1 TO ACHIEVE OPTIMAL CAPACITY FROM CABLES.



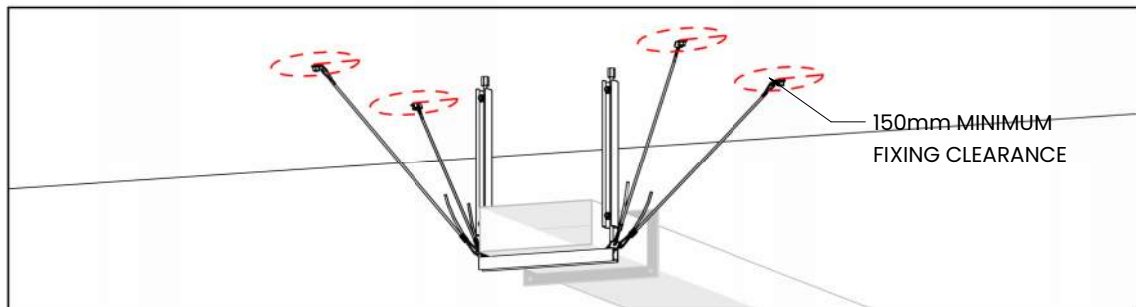
COLOURS DENOTE CABLE SPECIFIED BY SEISMIC DESIGN ENGINEER

CABLE / HANGER SETOUT





LAYOUT OF CABLE ANCHORS ON SOFFIT **CRITICAL** TO ACHIEVE DESIGN CAPACITY. FIX CABLE KIT BRACKETS WITH SEISMIC RATED ANCHORS.

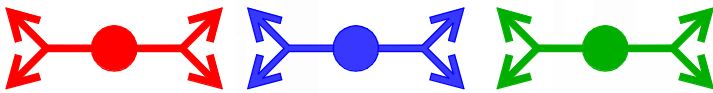
CLEARANCE AROUND ANCHORS.



CLEARANCE TO ANCHORS - **150mm CLEARANCE AROUND ANCHORS**

TYPICAL 4-WAY (DUCT)	SCHEDULE	
 	TYPE	R10, B10 or G10
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 4 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	4
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 2 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE SPECIFIED BY KUSCH
	ROD STIFFENER FIXINGS	@ 700mm CTS. (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	LENGTH VARIES
	STRUT WASHER	4
	M10 HEXNUT	4
12g Tek Screws	MIN Qty: 4; MAX 200mm CTS.	

PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE DETAILS WITHIN SECTION 1 TO ACHIEVE OPTIMAL CAPACITY FROM CABLES.



COLOURS DENOTE CABLE SPECIFIED BY SEISMIC DESIGN ENGINEER

TYPICAL 4-WAY CABLE BRACE **ALTERNATIVES**. THESE ALLOW CABLES TO CLEAR ADJACENT SERVICES.

OPTION TO ORIENT CABLES INTERNALLY, ALLOW 150mm MIN. CLEARANCE BETWEEN ANCHORS, FIXING TO DUCT WITH TEK SCREWS THROUGH TOP AND BOTTOM TRAPEZE.

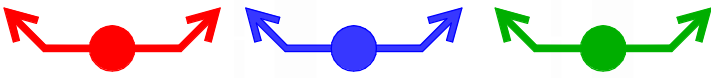
4-WAY MID-MOUNT (DUCT)	SCHEDULE	
	TYPE	(R12, B12 or G12) OR (R14, B14 or G14)
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 2 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	4
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 4 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE SPECIFIED BY KUSCH
	ROD STIFFENER FIXINGS	@ 700mm CTS. (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	LENGTH VARIES (x 2)
	STRUT WASHER	8
	M10 HEXNUT	8
	12g TEK SCREWS	MIN Qty: 8; MAX 200mm CTS.

TYPICAL 4-WAY CABLE BRACE **ALTERNATIVE**. THESE ALLOW PIPES TO SHARE GRAVITY SUPPORT AND ALLOWS CLEARANCE TO ADJACENT SERVICES.

OPTION TO ORIENT CABLES INTERNALLY, ALLOW 150mm MIN. CLEARANCE BETWEEN ANCHORS.

TYPICAL 4-WAY TRAPEZE (PIPE)	SCHEDULE	
	TYPE	(R16, B16 or G16) OR (R18, B18 or G18)
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 4 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	4
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 2 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE HANGING LENGTH >750mm
	ROD STIFFENER FIXINGS	@ 700mm CTS. (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	LENGTH VARIES
	STRUT WASHER	4
	M10 HEXNUT	4
	12g Tek Screws	N/A PIPE FIXED TO TRAPEZE WITH FM132 OR FM125

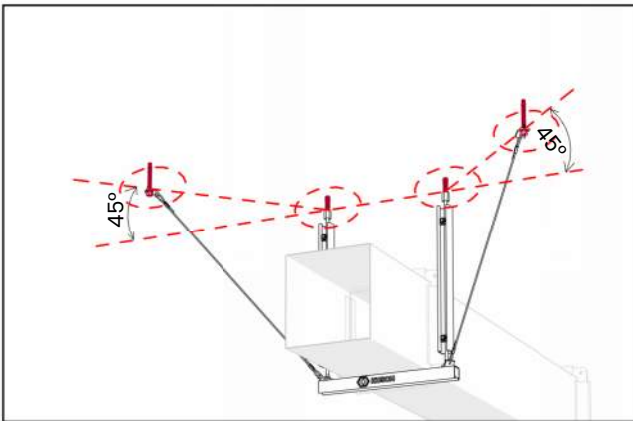
PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE DETAILS WITHIN SECTION 1 TO ACHIEVE OPTIMAL CAPACITY FROM CABLES.



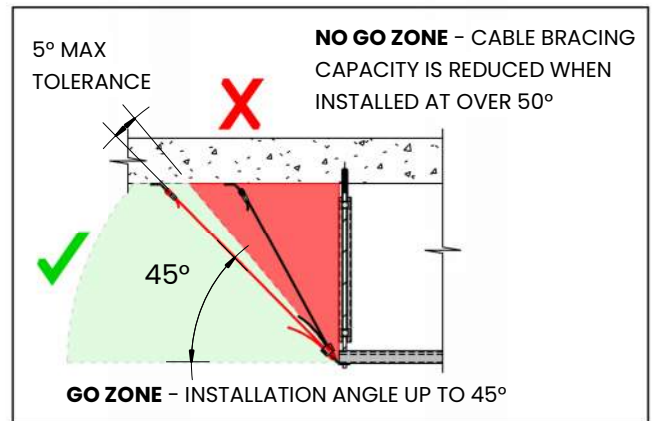
COLOURS DENOTE CABLE SPECIFIED BY SEISMIC DESIGN ENGINEER

Installed in pairs to provide lateral and longitudinal restraint.
Alternative to typical four-way cable brace, splitting the cables into two pairs to help avoid clash.

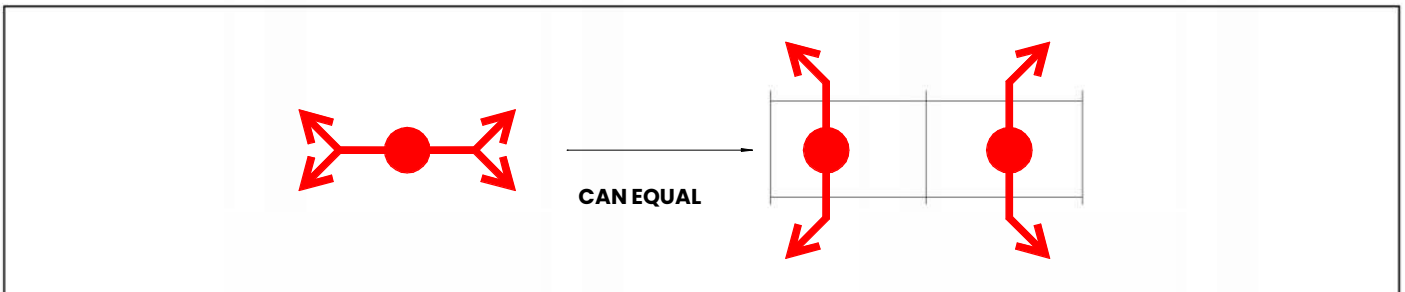
CABLE / HANGER SETOUT



INSTALL A PAIR OF CABLES, 45° FROM VERTICAL & 45° AROUND FROM PERPENDICULAR TO SUSPENDED SERVICE.
MAINTAIN 150mm MINIMUM FIXING CLEARANCE.

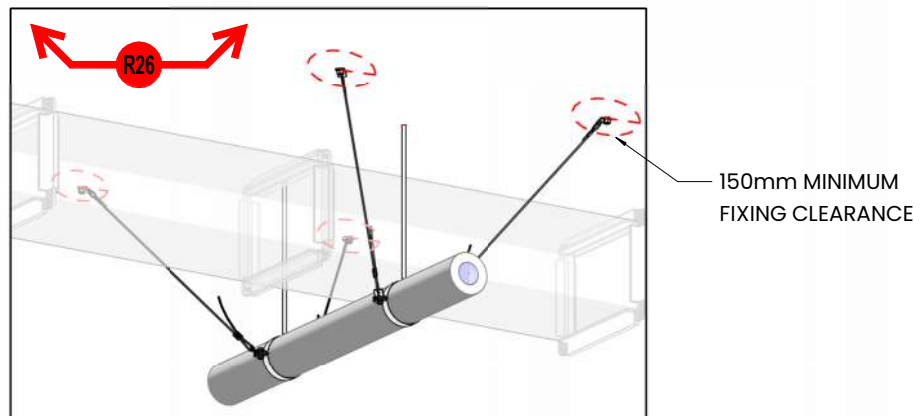


HOW TO APPLY ALTERNATIVE CABLE BRACE TYPES.



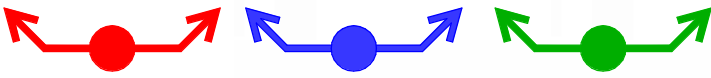
SPLIT A 4-WAY CABLE BRACE ACROSS TWO TRAPEZE TO ENABLE CLEARANCE TO ADJACENT SERVICES.

CLEARANCE AROUND ANCHORS.



ALTERNATIVE TO 4WAY CABLE BRACE, TYPICALLY INSTALLED IN PAIRS FACING OPPOSING DIRECTIONS.
ALLOWS FOR CLEARANCE TO ADJACENT SERVICES.

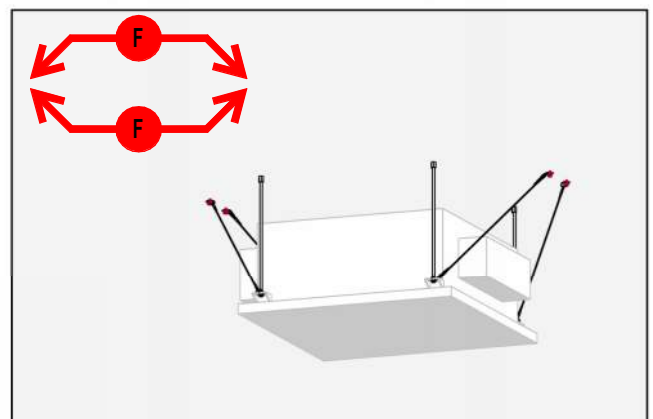
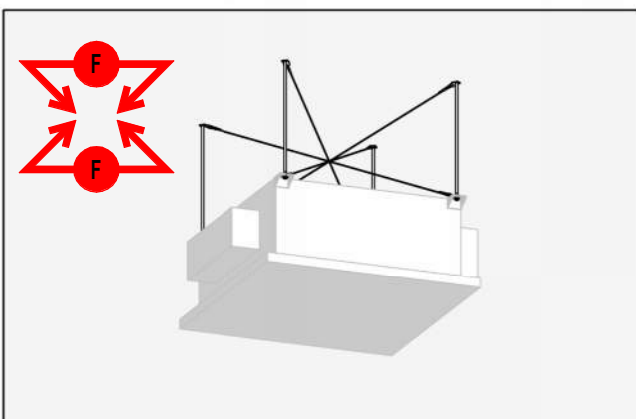
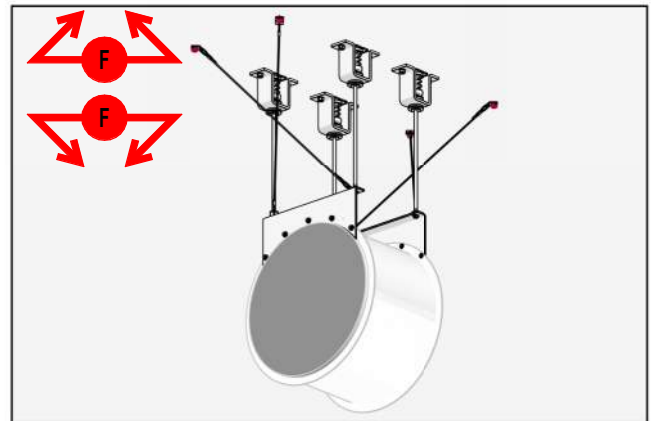
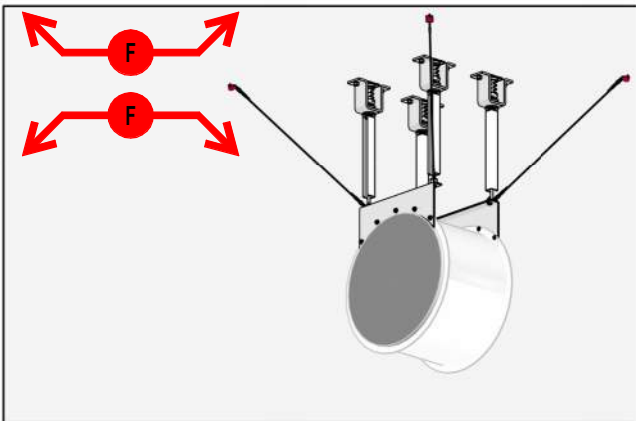
PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE DETAILS WITHIN SECTION 1 TO ACHIEVE OPTIMAL CAPACITY FROM CABLES.



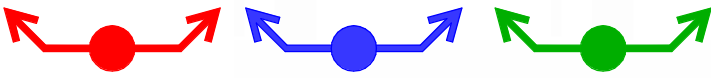
COLOURS DENOTE CABLE SPECIFIED BY SEISMIC DESIGN ENGINEER

SPLIT 4-WAY - FAN	SCHEDULE	
	TYPE	F
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 2 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	2
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 1 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE SPECIFIED BY KUSCH
	ROD STIFFENER FIXINGS	@ 700mm CTS. (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	N/A
	STRUT WASHER	N/A LARGE FLAT WASHER TO FAN PLATES / FCU BRACKETS
	M10 HEXNUT	4
	12g Tek Screws	N/A

The below are all **suitable variations** of the split 4-way cable brace. Use seismic spring mounts as required and maintain 150mm minimum clearance between anchors.



PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE DETAILS WITHIN SECTION 1 TO ACHIEVE OPTIMAL CAPACITY FROM CABLES.



COLOURS DENOTE CABLE SPECIFIED BY SEISMIC DESIGN ENGINEER

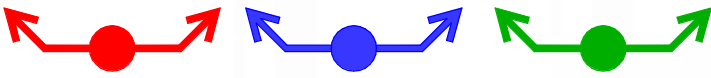
TYPICAL SPLIT 4-WAY (DUCT)	SCHEDULE	
	TYPE	R22, B22 or G22
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 2 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	2
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 2 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE SPECIFIED BY KUSCH
	ROD STIFFENER FIXINGS	@ 700mm CTS. (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	LENGTH VARIES
	STRUT WASHER	4
	M10 HEXNUT	4
	12g Tek Screws	MIN Qty: 4; MAX 200mm CTS.

TYPICAL SPLIT 4-WAY CABLE BRACE **ALTERNATIVE**. THESE ALLOW CABLES TO CLEAR ADJACENT SERVICES.



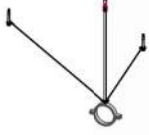
OPTION TO ORIENT CABLES INTERNALLY, ALLOW 150mm MIN. CLEARANCE BETWEEN ANCHORS, FIXING TO DUCT WITH TEK SCREWS THROUGH TOP AND BOTTOM TRAPEZE.

SPLIT 4-WAY MID-MOUNT & MID-MOUNT INTERNAL (DUCT)	SCHEDULE	
 	TYPE	R24, B24 or G24
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 2 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	2
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 2 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE SPECIFIED BY KUSCH
	ROD STIFFENER FIXINGS	@ 700mm CTS. (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	LENGTH VARIES (x 2)
	STRUT WASHER	8
	M10 HEXNUT	8
	12g Tek Screws	MIN Qty: 8; MAX 200mm CTS.

PLEASE READ THESE INSTRUCTIONS IN CONJUNCTION WITH THE DETAILS WITHIN SECTION 1 TO ACHIEVE OPTIMAL CAPACITY FROM CABLES.



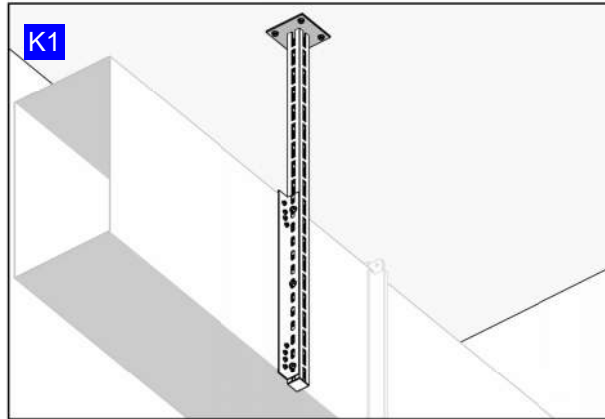
COLOURS DENOTE CABLE SPECIFIED BY SEISMIC DESIGN ENGINEER

SPLIT 4-WAY (PIPE)	SCHEDULE	
 <p>PREFERRED</p>  <p>OPTION - LOCK CABLES AT CLIP NUT (OVER).</p> 	TYPE	R26, B26 or G26
	CABLE KIT COLOUR	RED, BLUE or GREEN
	CABLE LENGTH	2m, 3m, or 5m
	CABLE ANCHORS	Qty: 2 Type: AS SPECIFIED (REFER TO SECTION 1 ANCHOR CHART)
	CABLE QTY	2
	MAX. CABLE ANGLE	FROM HORIZONTAL, UP TO 45°
	M10 ROD	LENGTH VARIES
	ROD ANCHORS	Qty: 1 Type: AS SPECIFIED (SEISMIC RATED)
	ROD STIFFENER	WHERE SPECIFIED BY KUSCH
	ROD STIFFENER FIXINGS	@ 700mm CTS. (WHERE 41mm STRUT IS USED AS ROD STIFFENER)
	41mm STRUT TRAPEZE	N/A
	STRUT WASHER	N/A
	M10 HEXNUT	1
	12g Tek Screws	N/A

SP50 posts are available with welded baseplates, in 750, 1000 & 1500mm lengths.

The fixing methods shown here for K1 (suspended SP50 post) can also be applied to floor fixed SP50 post (K1f) and wall fixed K1.

FIX 4- HILTI M10x90 HST4 **OR** 4-M10x90 ICCONS FM753 **OR** APPROVED EQUIVALENT. ALL INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPEC. 80mm MIN. EDGE DISTANCE.



TYPICAL K1 TO DUCT FIXING.

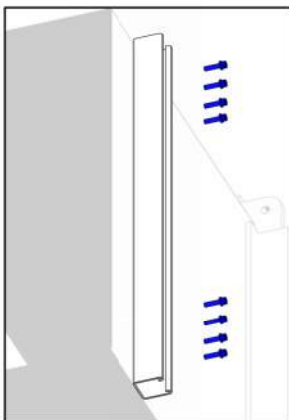
FIX 50x3 DURAGAL EQUAL ANGLE TO DUCT WITH 12g TEK SCREWS: Qty 8 Min.

(4- WITHIN TOP 100mm, 4- WITHIN BOTTOM 100mm)

FIX 50x3 DURAGAL EQUAL ANGLE TO POST WITH M10 BOLT THROUGH (M10x75) WITH 2-FM1063 AT MAX 400mm CENTRES.

Alternative fixing options for K1 posts to duct.

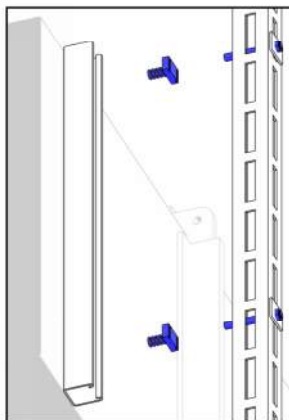
STEP 1. STRUT TO DUCT



FIX 41mm STRUT TO DUCT WITH 12g TEK SCREWS: Qty 8 Min.

(4- WITHIN TOP 100mm, 4- WITHIN BOTTOM 100mm)

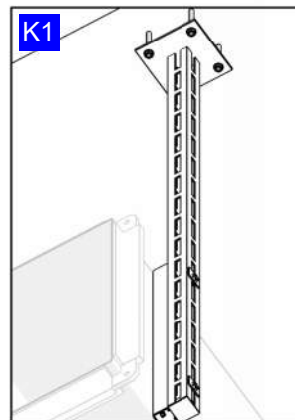
STEP 2. STRUT TO POST



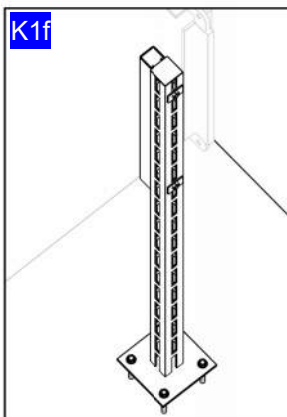
FIX 41mm STRUT TO POST WITH M10 BOLT THROUGH (M10x75)

WITH 1-FM1063 AND FM1008 AT MAX 400mm CENTRES.

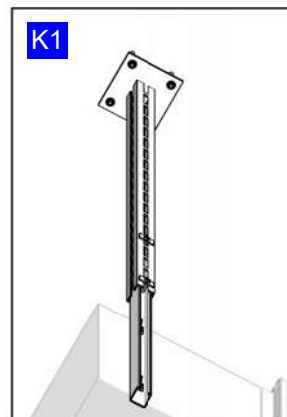
STEP 3. POST ANCHORS



FIX BASEPLATE WITH 4-M10 HILTI HST4 OR 4-M10 ICCONS FM753.



TYPICAL K1f AS PER ABOVE, SHOWN FIXING TO FLOOR



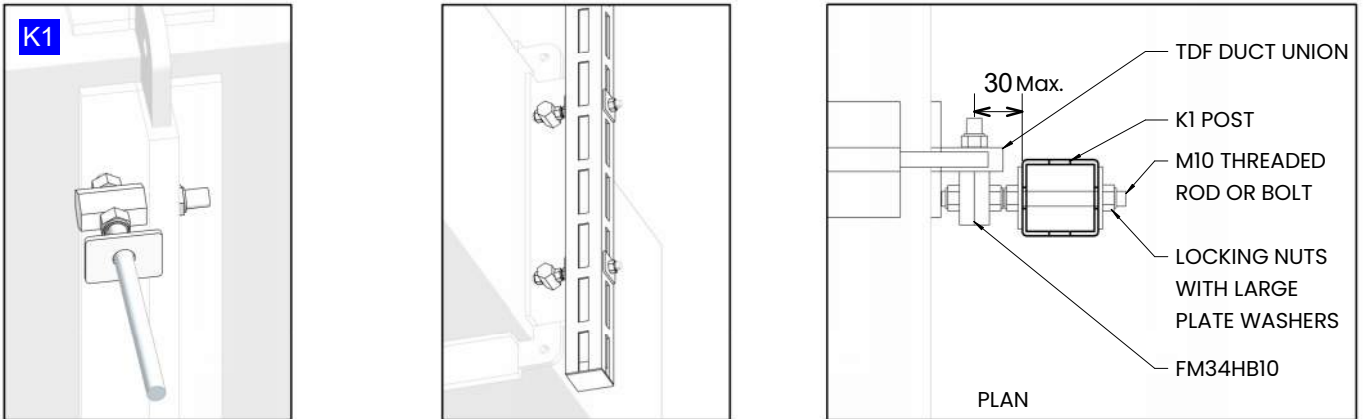
ALTERNATIVE TO TYPICAL K1, WHERE POST HEIGHT IS GREATER THAN 1500mm. SLEEVE 41mm STRUT TO SP50 WITH 2-M10 BOLTS & FM1008 AT MIN 300 CENTRES.

FIX 41mm STRUT TO DUCT WITH 12g TEK SCREWS: Qty 8 Min. (4- WITHIN TOP 100mm, 4- WITHIN BOTTOM 100mm)

FM1063 (SQUARE PLATE WASHER) TO ALL BOLTS THROUGH STRUT.

Alternative fixing options for K1 posts to duct.

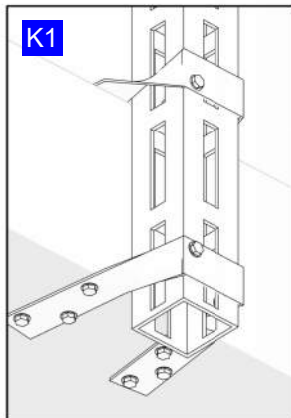
ALTERNATIVE POST TO DUCT FIXING, FM34HB10 TO TDF DUCT UNION AVOIDS DRILLING DUCT WALL.



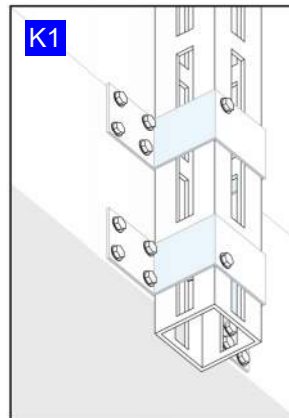
DRILL 12mm HOLES 100mm FROM TOP & BOTTOM OF DUCT & FIX 2-FM34HB10 WITH LOCKING NUT. THREADED ROD OR M10x120mm THROUGH SP50, LOCKED AS SHOWN WITH 2-LARGE FLAT WASHERS.

FM1063 (SQUARE PLATE WASHER) TO ALL BOLTS THROUGH STRUT.

ALTERNATIVE METHOD,
32x1.2 METAL STRAP
WITH MIN. 4-12g TEK SCREWS,
TOP AND BOTTOM.

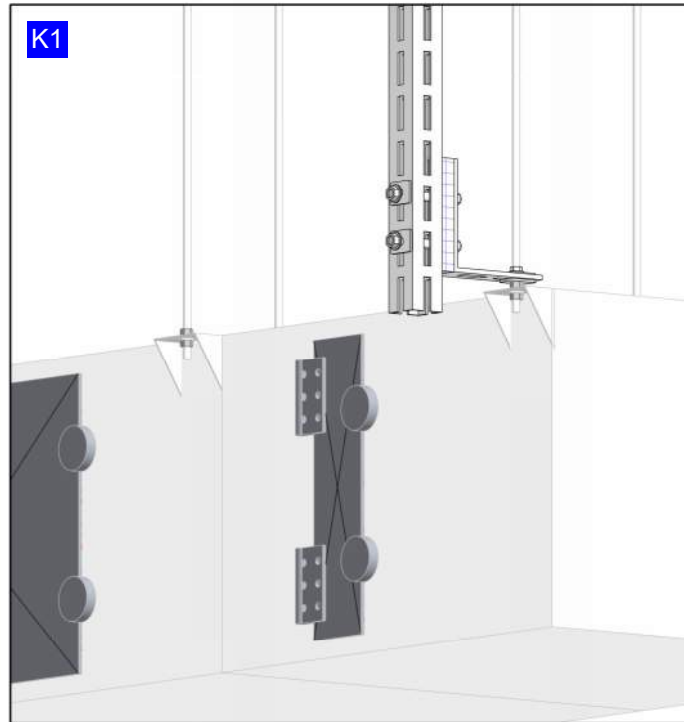


ALTERNATIVE METHOD,
3mm TOP HAT
WITH MIN. 6-12g TEK SCREWS,
TOP AND BOTTOM.



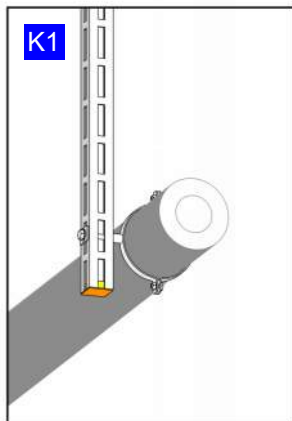
To prevent vibration issues when bracing equipment using cantilever posts, vibration isolation must be installed. Refer to the detail below.

K1 POST TO FCU INCLUDING VIBRATION ISOLATION

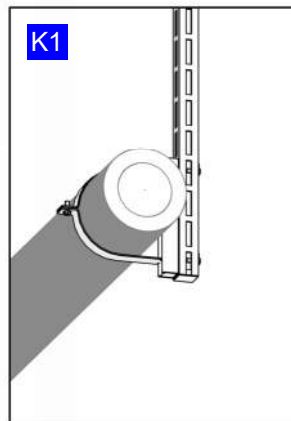


SP50-1325 BRACKET TO K1 WITH VIBRATION ISOLATION AND 2-M10 BOLTS THROUGH. LOCKED TO FCU WITH NUTS TOP AND BOTTOM TO HANGING ROD. FM1063 (PLATE WASHERS) TO BOLTS THROUGH STRUT.

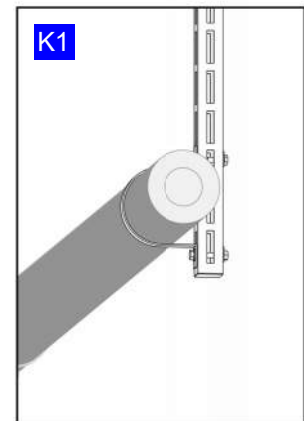
Alternative fixing options for K1 posts to pipe.



NUT CLIP WITH M10 BOLT THROUGH AND LARGE PLATE WASHER TO K1.



2-M10 BOLTS THROUGH K1 TO 41mm STRUT WITH 2-FM1008. FM132 PIPE CLAMP TO STRUT.



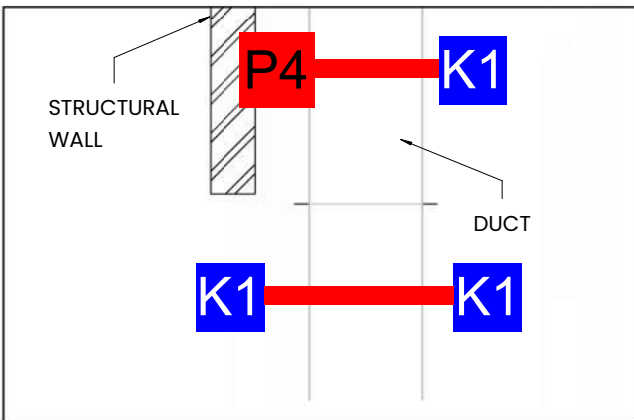
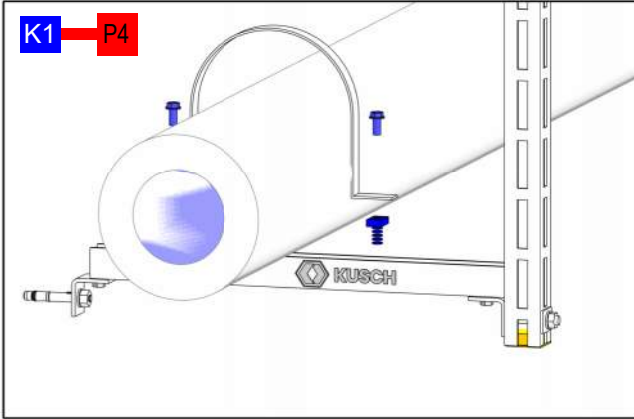
2-M10 BOLTS THROUGH K1 TO FM125 PIPE CLAMP TO K1. OPTION TO ADD 41mm STRUT AS PER FM132 DETAIL.

FM1063 (SQUARE PLATE WASHER) TO ALL BOLTS THROUGH STRUT.

NOTE: SUPA50 POSTS ARE AVAILABLE IN 1500, 1000 & 750mm

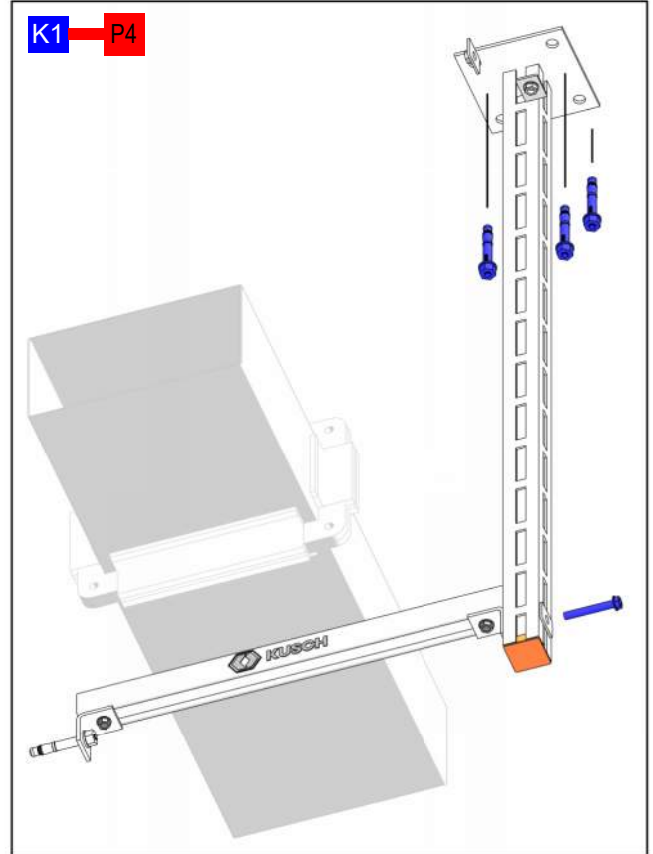
FIX 4- HILTI M10x90 HUS-H **OR** HILTI M10x90 HST4 **OR** M10x90 ICCONS FM753 **OR** APPROVED EQUIVALENT. ALL INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPEC. 80mm MIN. EDGE DISTANCE.

STRUT TRAPEZE TO MECHANICAL PIPEWORK, SHOWN WITH SADDLE CLAMP, M10 BOLTS AND FM1008.



TYPICAL GRAPHICAL REPRESENTATION - PLAN

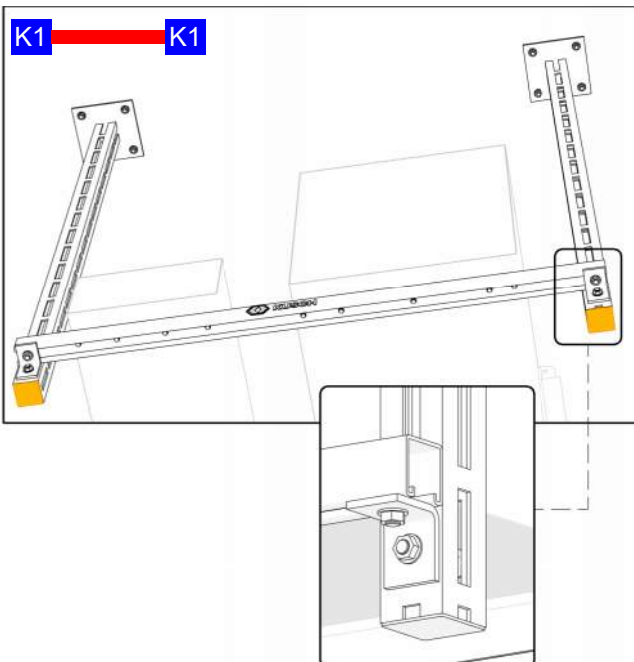
STRUT TRAPEZE TO DUCTWORK.



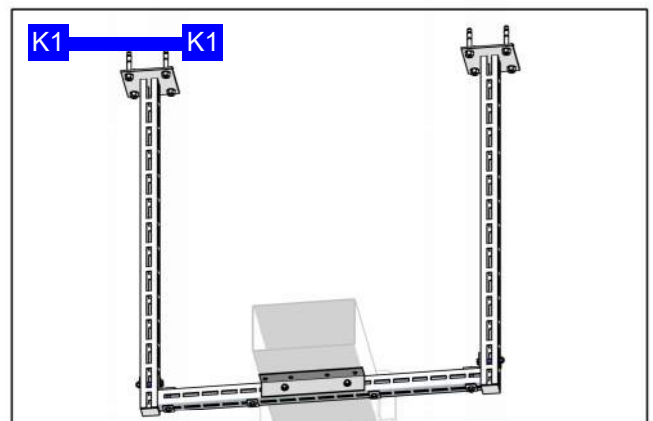
FIX 41mm STRUT TO DUCT WITH 12g TEK SCREWS:
QTY: 4 MIN.; 200mm MAX. CENTRES.

FIX 41mm STRUT TO K1 POST WITH FM1026 WITH M10 BOLT AND FM1008. STRUT WASHER TO M10 BOLT THROUGH POST TO FM1026. SAFETY CAP AS REQUIRED.

TYPICAL K1 TRAPEZE , 2-K1 POSTS WITH 41mm STRUT TRAPEZE.



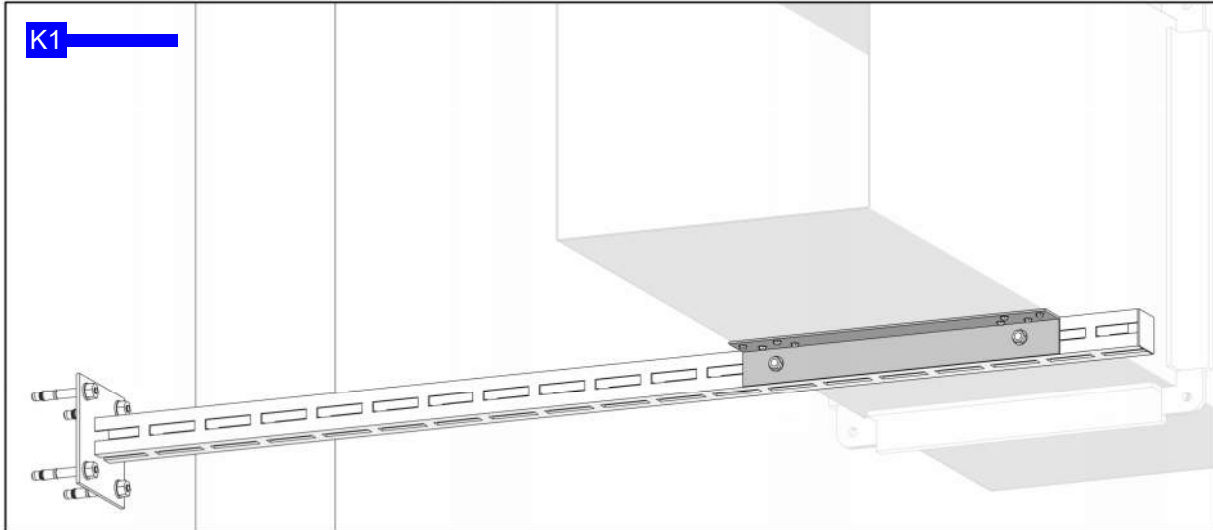
SP50 TRAPEZE FOR GREATER CAPACITY.
ALTERNATE BRACKET ARRANGEMENT,
STRUT TO INSIDE FACE OF POST.



NOTE: SUPA50 POSTS ARE AVAILABLE IN 1500, 1000 & 750mm

FIX 4- HILTI M10x90 HUS-H **OR** HILTI M10x90 HST4 **OR** M10x90 ICCONS FM753 **OR** APPROVED EQUIVALENT. ALL INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPEC. 80mm MIN. EDGE DISTANCE.

TYPICAL K1 POST CANTILEVERED FROM WALL

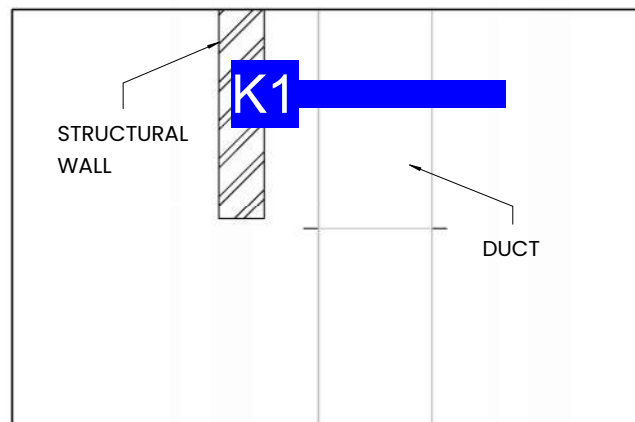


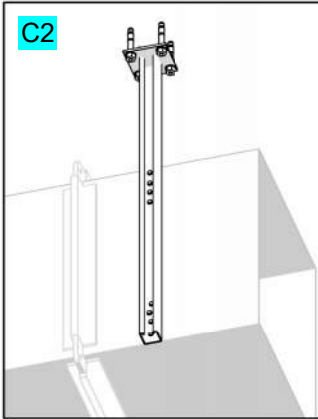
FIX EQUAL ANGLE TO SP50 WITH 2-M10x70mm BOLTS THROUGH WITH STRUT WASHERS OTHER SIDE. FIX EQUAL ANGLE TO DUCT WITH 8-12g TEK SCREWS. 4 IN FIRST 100mm AND 4 IN LAST 100mm AS SHOWN.

Apply the same fixing methodology to wall mounted K1 as for floor or soffit fixed.

Ensure wall is concrete or core filled blockwork.

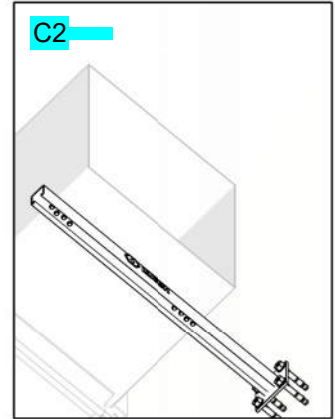
PLAN



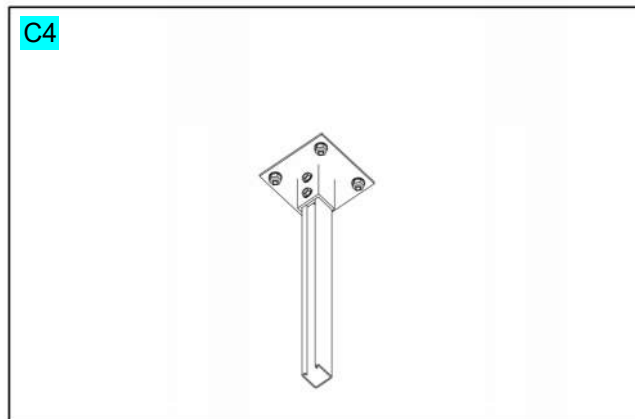


WELDED BASEPLATE TO 41mm STRUT.
FIXING DETAILS TO DUCT AND PIPE AS PER K1 POST.
12g TEK SCREWS: Qty 8 Min.
**(4- WITHIN TOP 100mm,
4- WITHIN BOTTOM 100mm).**

FIX FM2073 WELDED 41mm STRUT WITH 4-HILTI M10x90 HST4
OR 4-M10x90 ICCONS FM753 **OR** APPROVED EQUIVALENT. ALL
INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPEC.
80mm MIN. EDGE DISTANCE.
NOTE: FM2073 (L) LENGTHS ARE MADE TO ORDER.

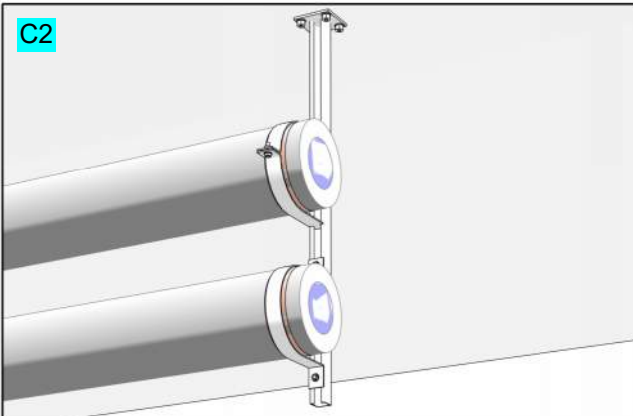


C2 & C4 can be applied to duct and pipe in all the ways K1 posts can (at reduced capacity), as specified by the design engineer.



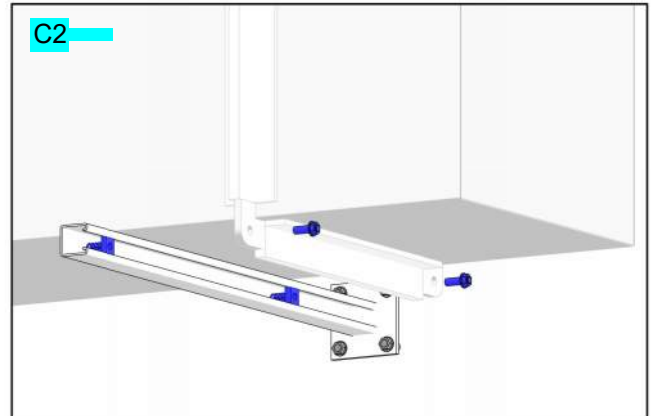
FM2072 BOLTED BASEPLATE
41mm STRUT BASEPLATE
WITH 4-M10 SEISMIC RATED ANCHORS.
2-M10x35 G4.6 BOLTS
THROUGH STUB TO FM1008 WITHIN
STRUT.

ALTERNATIVE FIXING TO MECHANICAL PIPEWORK.



FM132 PIPE CLAMP TO STRUT, OR
2-M10 BOLTS & 2-FM1008 TO
FM125 PIPE CLAMP.

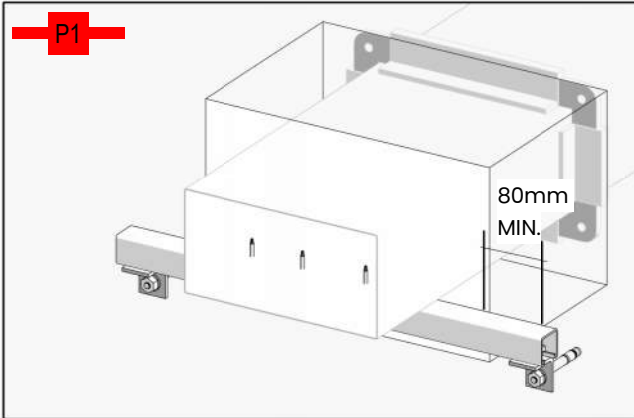
ALTERNATIVE FIXING TO DUCT UNION.



FIX DUCT WITH M10 BOLTS THROUGH DUCT FLANGE INTO FM1008.

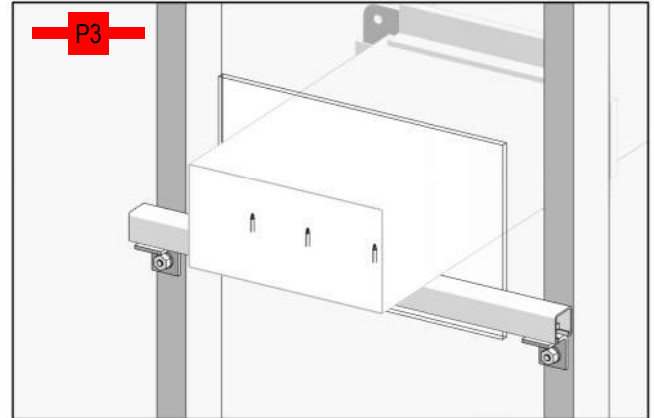
FIX TO: CONCRETE / CORE-FILLED BLOCK WALL WITH HILTI M10x90 HUS-H
OR HILTI M10x90 HST4 **OR** M10x90 ICCONS FM753 **OR** APPROVED
 EQUIVALENT.
 (ALL ACCORDING TO MANUFACTURERS SPEC.)

TYPICAL P1, FIXED TO CONCRETE OR CORE FILLED WALL.



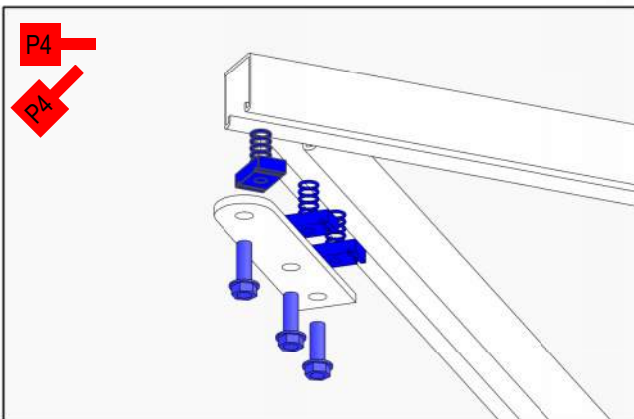
FIX DUCT WITH 12g TEK SCREWS: QTY 4 MIN.
 AT 200mm MAX. CENTRES.
 41mm STRUT WITH FM1010, M12 BOLTS & FM1026 ANGLE
 BRACKETS.
 MAINTAIN 80mm MIN EDGE DISTANCE TO ANCHORS.

ALTERNATIVE TO P1, FIXED TO STUD WALL.

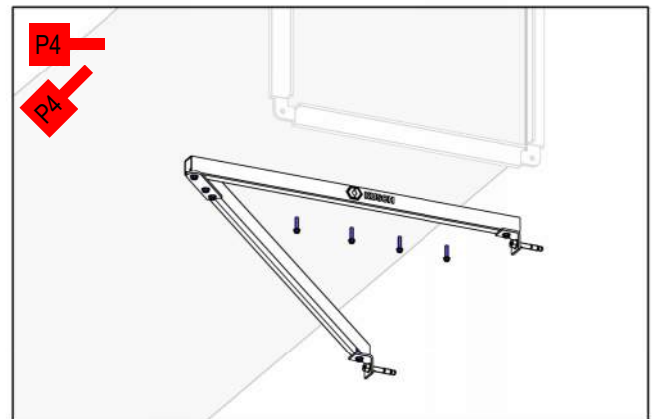


FIX DUCT WITH 12g TEK SCREWS: QTY 4 MIN. SPACING AT
 200mm MAX. CENTRES.
 M10x45 COACH BOLT TO TIMBER STUDS. 12g TEK SCREWS TO
 STEEL STUDS.

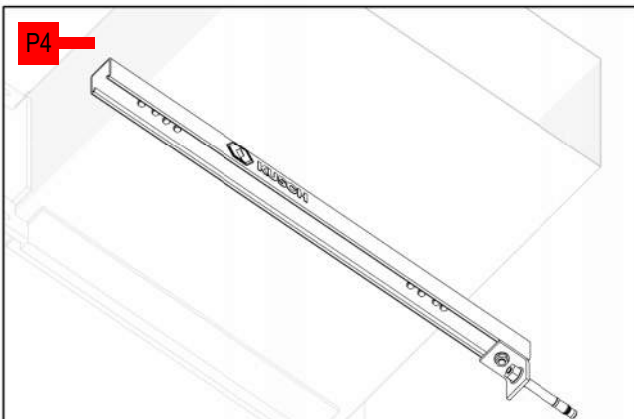
VARIATION OF P4. GREATER CAPACITY WITH ANGLE BRACE.



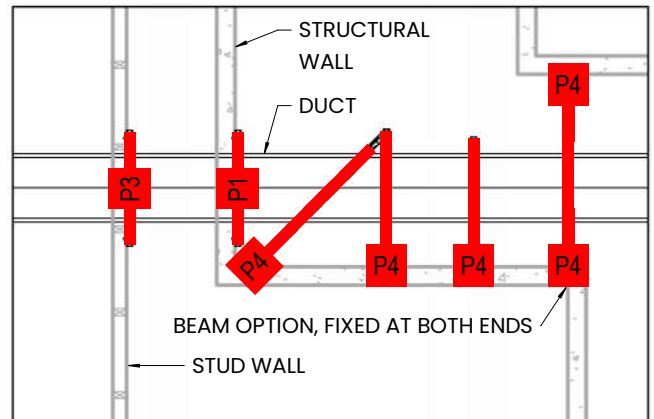
P2324 BRACKET WITH 3-M12 BOLTS & FM1010.



FIX DUCT WITH 12g TEK SCREWS: QTY 4 MIN.
 AT 200mm MAX. CENTRES

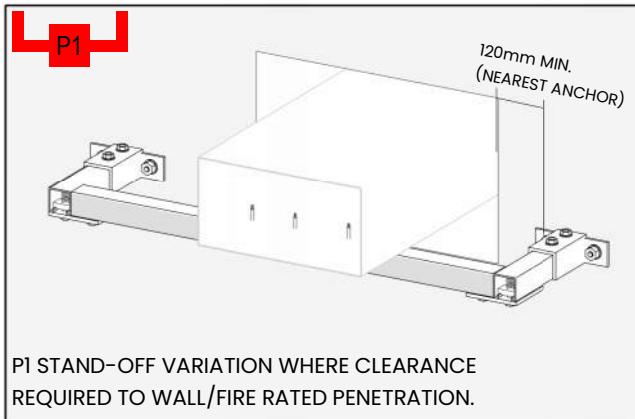


FIX DUCT WITH 12g TEK SCREWS: Qty 8 Min.
(4- WITHIN FIRST 100mm, 4- WITHIN LAST 100mm).
 41mm STRUT WITH FM1010, M12 BOLTS & FM1026 ANGLE BRACKETS.
 MAINTAIN 80mm MIN EDGE DISTANCE TO ANCHORS.



TYPICAL GRAPHICAL REPRESENTATION - PLAN

FIX TO: CONCRETE / CORE-FILLED BLOCK WALL WITH HILTI M10x90 HUS-H
OR HILTI M10x90 HST4 **OR** M10x90 ICCONS FM753 **OR** APPROVED
EQUIVALENT.
(ALL ACCORDING TO MANUFACTURERS SPEC.)

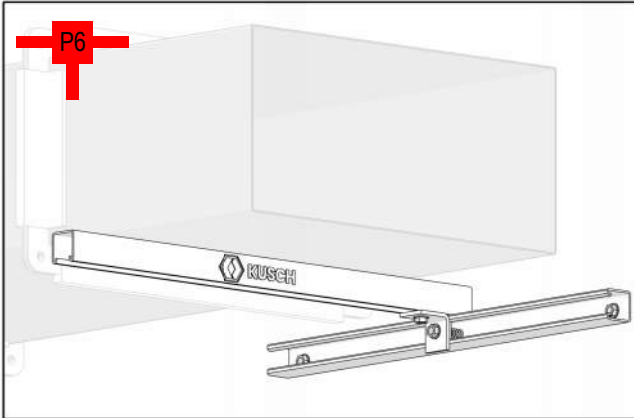


P1 STAND-OFF VARIATION WHERE CLEARANCE
REQUIRED TO WALL/FIRE RATED PENETRATION.

FM2346 BRACKET TO WALL WITH 2-M12 SEISMIC RATED
ANCHORS AND 2-M12 BOLTS AND CHANNEL NUTS TO SHORT
PIECE OF 41mm STRUT. FM1036 BRACKET WITH 3-M12 BOLTS
AND CHANNEL NUTS JOIN 41mm STRUT.

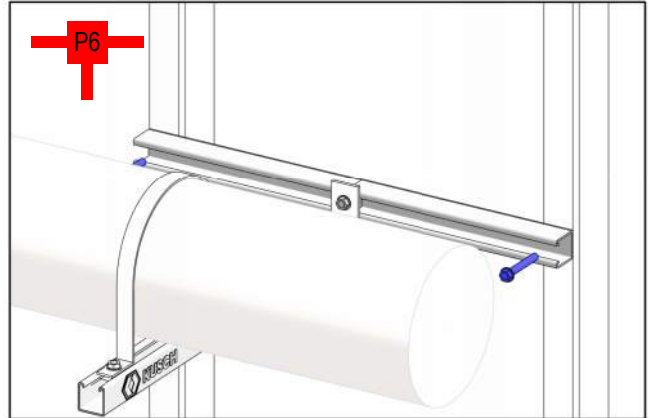
FIX TO: CONCRETE / CORE-FILLED BLOCK WALL WITH
HILTI M10x90 HUS-H **OR** HILTI M10x90 HST4 **OR** M10x90 ICCONS FM753 **OR** APPROVED EQUIVALENT.
(ALL ACCORDING TO MANUFACTURERS SPEC.)

TYPICAL P6 FIXING DUCT TO CONCRETE OR CORE FILLED WALL.



FIX DUCT WITH 12g TEK SCREWS: Qty 8 Min.
(4- WITHIN FIRST 100mm, 4- WITHIN LAST 100mm).
FIX FM1026 ANGLE BRACKET TO STRUT WITH 2-M12 BOLT
AND FM1010.

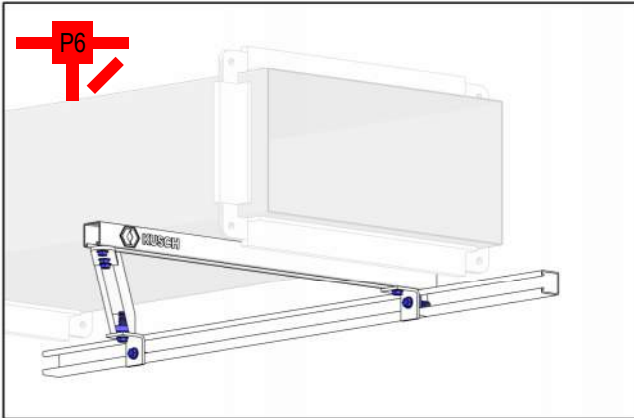
ALTERNATIVE FIXING TO STUD WALL, TYPICAL PIPE CLAMP.



FIX TO STEEL FRAME WITH 14g TEK SCREWS.
FIX TO TIMBER FRAME WITH M10X45 COACH BOLTS.

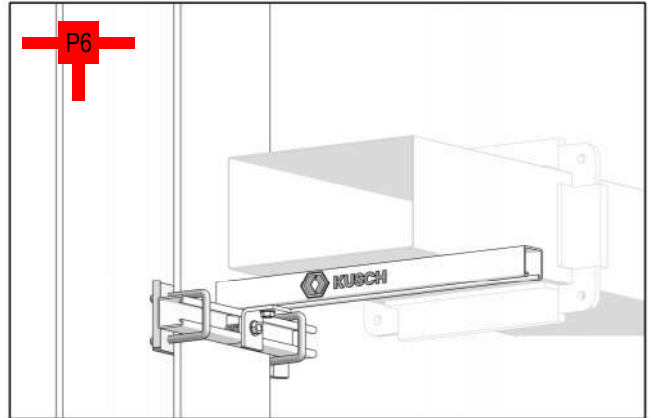
ALTERNATIVE TO P6, P6T (TWIN), GREATER CAPACITY WITH
ANGLE BRACE.

FIXING TO CONCRETE, CORE FILLED OR STUD WALL.



FM2324 WITH 3-M12 BOLTS AND 3-FM1010.
FM1026, M12 BOLTS AND FM1010 AS PER TYPICAL P4T / P6.
FIX DUCT WITH 12g TEK SCREWS: QTY 4 MIN.
AT 200mm MAX. CENTRES.

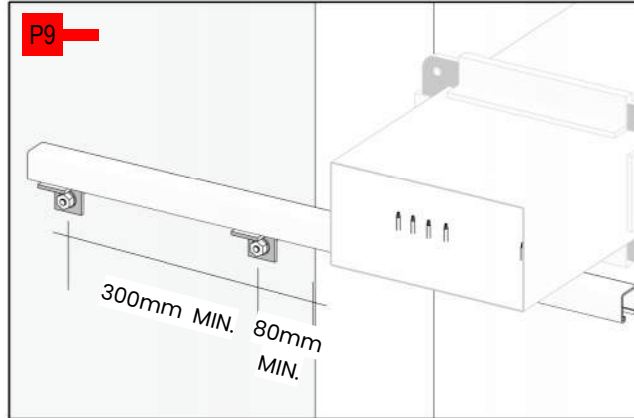
ALTERNATIVE P6, CLAMPED TO COLUMN (FLANGE).



CLAMP 2-FM174 TO 41mm STRUT AND TO COLUMN FLANGE.
FIX FM1026 BRACKET, M12 BOLTS AND FM1010 TO STRUT.
FIX DUCT WITH 12g TEK SCREWS: Qty 8 Min.
(4- WITHIN FIRST 100mm, 4- WITHIN LAST 100mm).

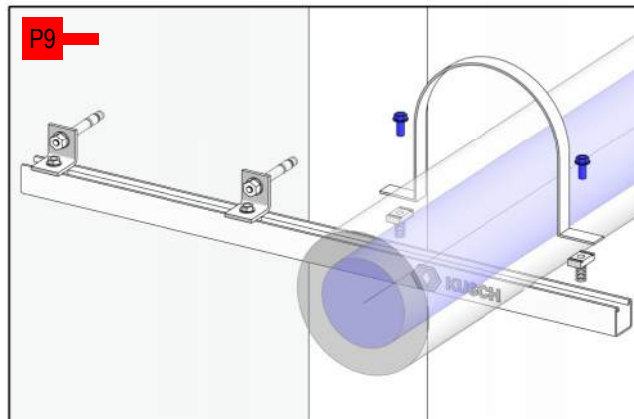
FIX TO: CONCRETE / CORE-FILLED BLOCK WALL WITH
HILTI M10x90 HUS-H OR HILTI M10x90 HST4 OR M10x90 ICCONS FM753 OR APPROVED EQUIVALENT.
(ALL ACCORDING TO MANUFACTURERS SPEC.)

TYPICAL P9 TO CONCRETE, CORE FILLED OR STUD WALL



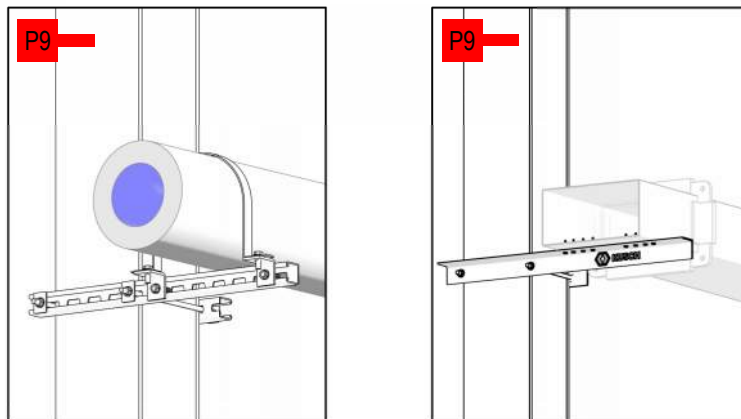
TO CONCRETE, COREFILLED BLOCKWORK OR TO STUD WALL.
FIX DUCT WITH 12g TEK SCREWS: Qty 8 Min.
(4- WITHIN FIRST 100mm, 4- WITHIN LAST 100mm).

TYPICAL P9 FIXING MECHANICAL PIPEWORK.



FIX PIPE WITH FM125 OR FM132 TYPE PIPE CLAMPS.

ALTERNATIVE P9 OPTIONS , CLAMPED TO STRUCTURAL COLUMNS.

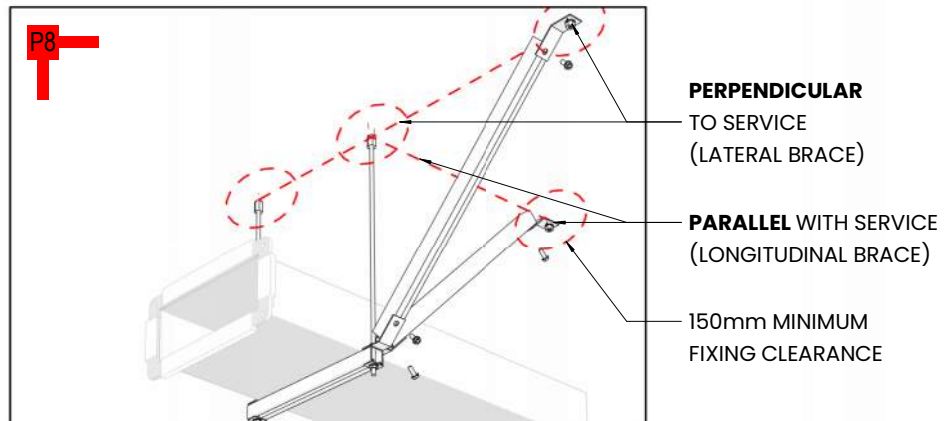


M12 ROD WITH LARGE PLATE WASHERS EITHER SIDE OF STRUT / 50x3 DURAGAL
EQUAL ANGLE. FM1026, M12 BOLTS AND FM1010 FOR PIPE CLAMP.
FIX DUCT WITH 12g TEK SCREWS: Qty 8 Min.
(4- WITHIN FIRST 100mm, 4- WITHIN LAST 100mm).

FMI546 BRACKETS TO SOFFIT TO THIS LAYOUT WITH HILTI M10x90 HUS-H **OR** HILTI M10x90 HST4 **OR** M10x90 ICCONS FM753 **OR** APPROVED EQUIVALENT. ALL INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPEC. 80mm MIN. EDGE DISTANCE.

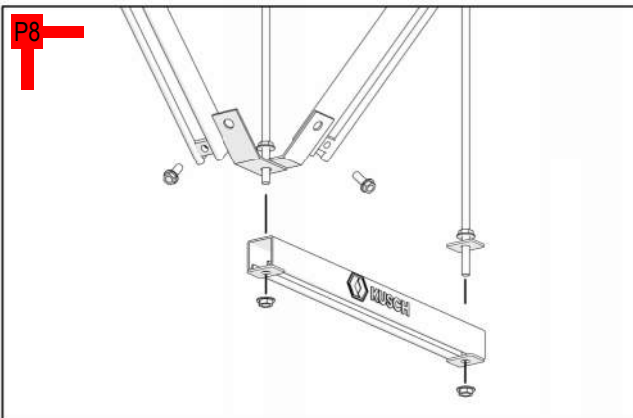
TYPICAL P8 SET OUT.

DISTANCE FROM HANGER **EQUALS** HEIGHT OF HANGER (ACHIEVE 45°).



OPTION TO USE E1354 HINGE WHERE FMI546 IS UNSUITABLE. MAINTAIN ANGLES FLATTER THAN 45°. FIX DUCT WITH 12g TEK SCREWS: QTY 4 MIN. AT 200mm MAX. CENTRES.

TYPICAL P8 BRACKET ASSEMBLY.



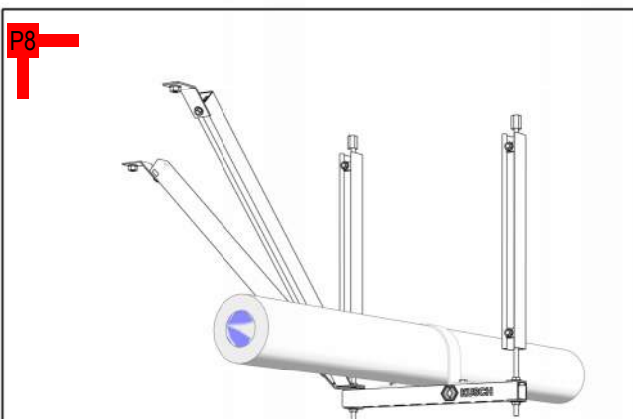
FMI546 BRACKETS TO HANGING RODS ABOVE STRUT TRAPEZE, STRUT WASHERS ELSEWHERE. M12 BOLTS TO FMI546 / E1354 WITH FMI1010.

ALTERNATIVE TO TYPICAL P8. RELOCATING THE BRACE TO AN INTERMEDIATE TRAPEZE PROVIDES MORE CLEARANCE TO ADJACENT SERVICES.



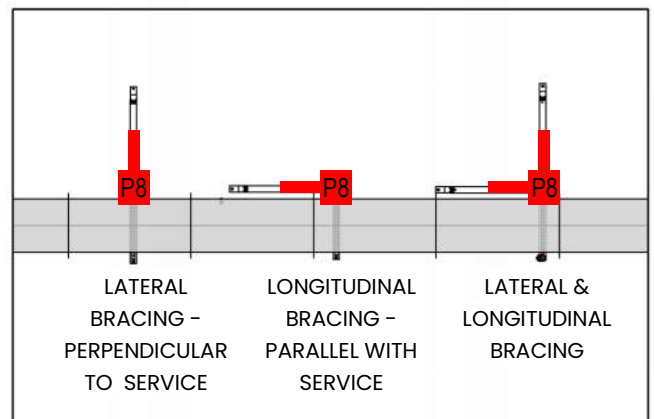
FIX DUCT WITH 12g TEK SCREWS: QTY 4 MIN. AT 200mm MAX. CENTRES TO **TOP AND BOTTOM** TRAPEZE.

TYPICAL P8 TO PIPEWORK.



FIX WITH FMI25 OR FMI32 CLAMPS, M10 BOLTS & CHANNEL NUTS. (TIMBER FERRULES AS REQUIRED)

VARIATIONS OF P8 AS APPLIED BY DESIGN ENGINEER TO

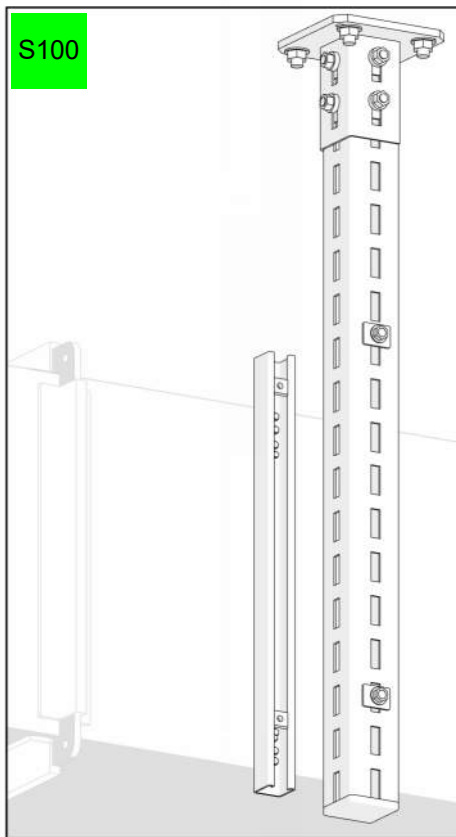


TYPICAL GRAPHICAL REPRESENTATION – PLAN



S50	SUPA 50	F50	SUPA 50	M10 SPBOLTS; M10 HILTI HST4 OR M10 ICCONS FM753 ANCHORS.
S80	SUPA 80	F80	SUPA 80	M12S SPBOLTS AND M16 HILTI HST4 OR M16 ICCONS THRU-BOLT ULTRA PRO ANCHORS.
S100	SUPA 100	F100	SUPA 100	M12S SPBOLTS; M16 HILTI HST4 OR M16 ICCONS THRU-BOLT ULTRA PRO ANCHORS.
SOFFIT-FIXED		FLOOR-FIXED		

Duct & pipe fixing method similar **across all types** (SP100, SP80 & SP50) floor, soffit and floor-soffit (column) types.



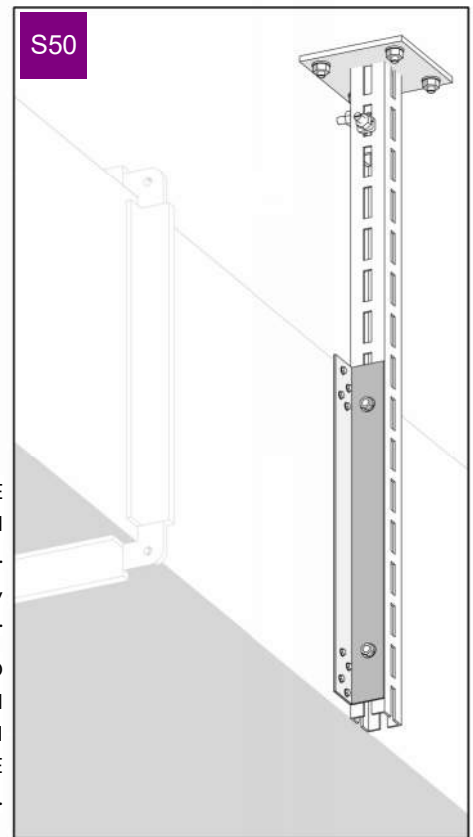
FIX 41mm STRUT TO DUCT WITH 12g TEK SCREWS: Qty 8 Min. (4- WITHIN TOP 100mm, 4- WITHIN BOTTOM 100mm).

FIX 41mm STRUT TO **SP100 / SP80 / SP50** POST / COLUMN WITH MIN 2-FM1010, M12 BOLT THROUGH AND LARGE PLATE WASHER.

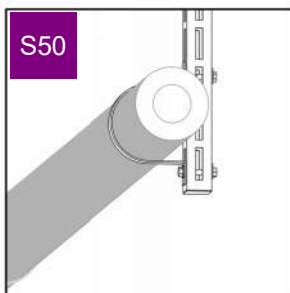
FIX 50x3 DURAGAL EQUAL ANGLE TO DUCT WITH 12g TEK SCREWS: Qty 8 Min. (4- WITHIN TOP 100mm, 4- WITHIN BOTTOM 100mm).

FIX 50x3 DURAGAL EQUAL ANGLE TO **SP100 / SP80 / SP50** POST / COLUMN WITH MIN 2-M12 BOLT THROUGH AND LARGE PLATE WASHER.

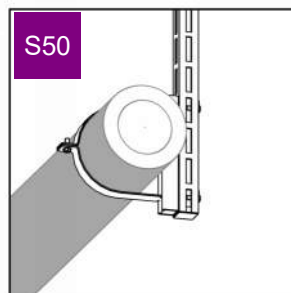
FIX **SP80/100-2072** BASEPLATE TO SUPA WITH 6-SPBOLT-M12S. FIX BASEPLATE TO SOFFIT WITH 4-M16 HILTI HST4, ICCONS FM753 OR APPROVED EQUIVALENT SEISMIC RATED ANCHORS.



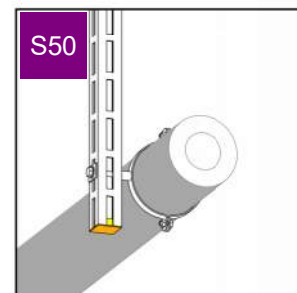
FIX **SP50-2072** BASEPLATE TO SUPA WITH 2-SPBOLT-M10S. FIX BASEPLATE TO SOFFIT WITH 4-M10 HILTI HST4, ICCONS FM753 OR APPROVED EQUIVALENT SEISMIC RATED ANCHORS.



2-M10 BOLTS THROUGH K1 TO FM125 PIPE CLAMP TO K1. OPTION TO ADD 41mm STRUT AS PER FM132 DETAIL.



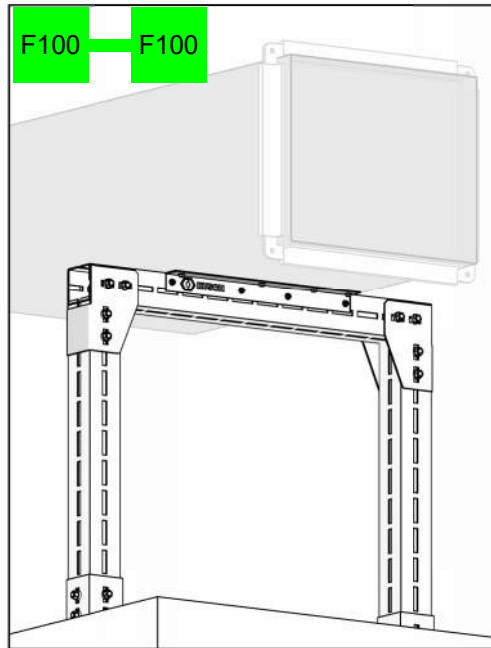
2-M10 BOLTS THROUGH K1 TO 41mm STRUT WITH 2-FM1008. FM132 PIPE CLAMP TO STRUT.



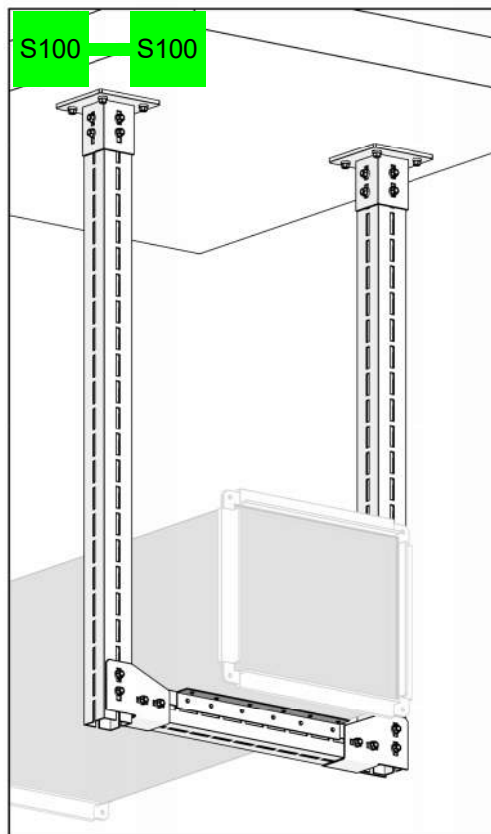
NUT CLIP WITH M10 BOLT THROUGH AND LARGE PLATE WASHER TO K1.

SPX-1063 (SQUARE PLATE WASHER) TO ALL BOLTS THROUGH STRUT.

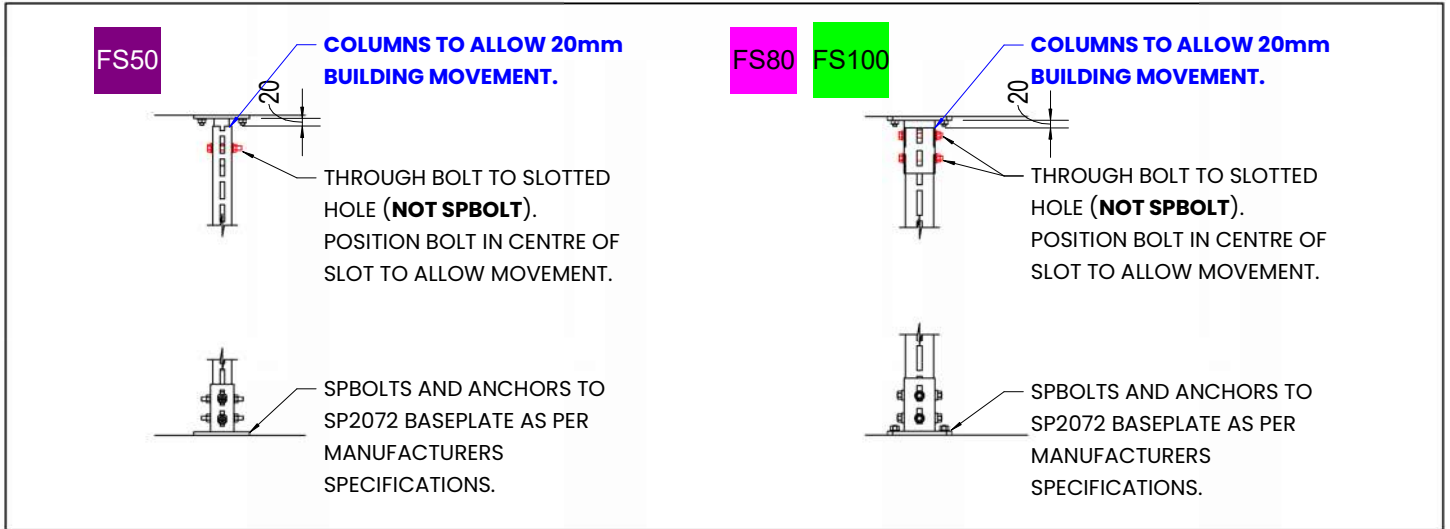
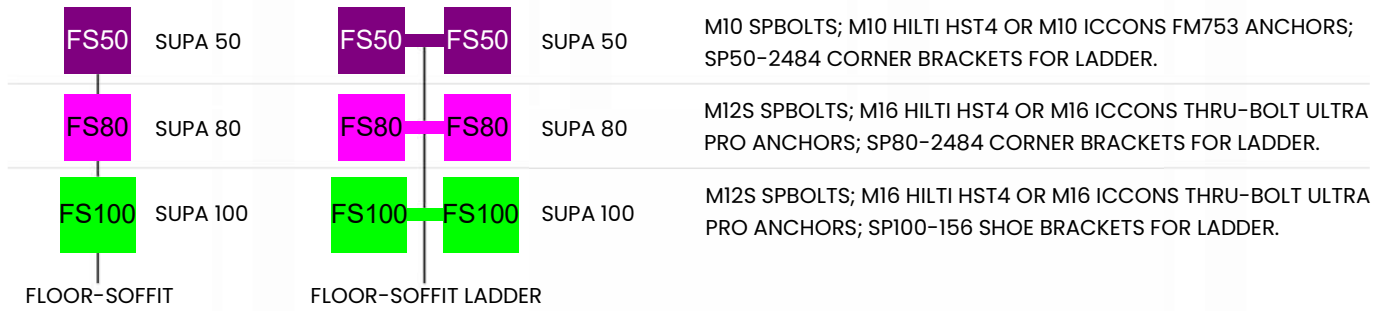
S50	SUPA 50	F50	SUPA 50	M10 SPBOLTS; M10 HILTI HST4 OR M10 ICCONS FM753 ANCHORS.
S80	SUPA 80	F80	SUPA 80	M12S SPBOLTS AND M16 HILTI HST4 OR M16 ICCONS THRU-BOLT ULTRA PRO ANCHORS.
S100	SUPA 100	F100	SUPA 100	M12S SPBOLTS; M16 HILTI HST4 OR M16 ICCONS THRU-BOLT ULTRA PRO ANCHORS.
SOFFIT-FIXED		FLOOR-FIXED		



F100 POST HURDLE FRAME, WITH 2-SP156 SHOE BRACKETS EACH WITH 8-SPBOLT-M12S. FIX DUCT TO SP100 WITH EITHER 41mm STRUT OR 50x3 DURAGAL EQUAL ANGLE. MIN. 4-12g TEK SCREWS AT MAX 200mm CENTRES.

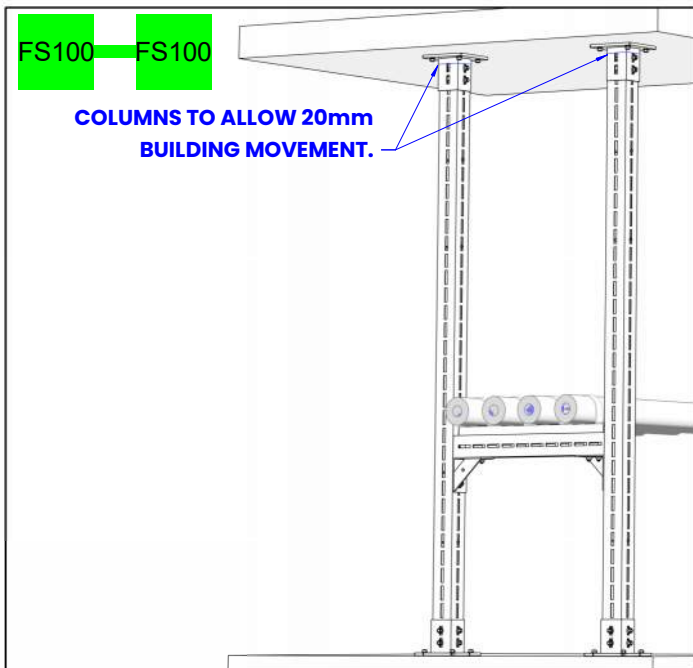
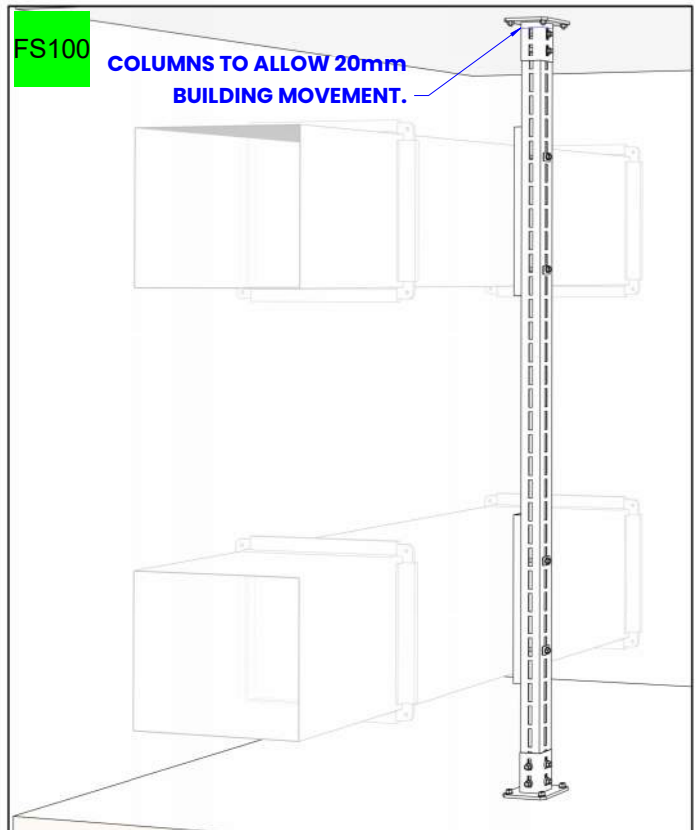


S100 POST HURDLE FRAME, WITH 2-SP156 SHOE BRACKETS EACH WITH 8-SPBOLT-M12S. FIX DUCT TO SP100 WITH EITHER 41mm STRUT OR 50x3 DURAGAL EQUAL ANGLE. MIN. 4-12g TEK SCREWS AT MAX 200mm CENTRES.



SP100 **FLOOR TO SOFFIT** (FS100)
FIX 41mm STRUT TO DUCT WITH
12g TEK SCREWS: Qty 4 Min.
AT MAX. 200mm CENTRES.

FIX 41mm STRUT TO SP100 / SP80 /
SP50 POST / COLUMN WITH
MIN 2-FM1010, M12 BOLT THROUGH
AND LARGE PLATE WASHER.



SP100 **LADDER** ACROSS 2 COLUMNS (FS100)
SP100-2484 ANGLE BRACKET WITH
4-SPBOLT-M12S.
41mm STRUT FIXED TO SP100 MEMBER WITH M12
BOLTS THROUGH AND FM1010 @ 400mm CENTRES.

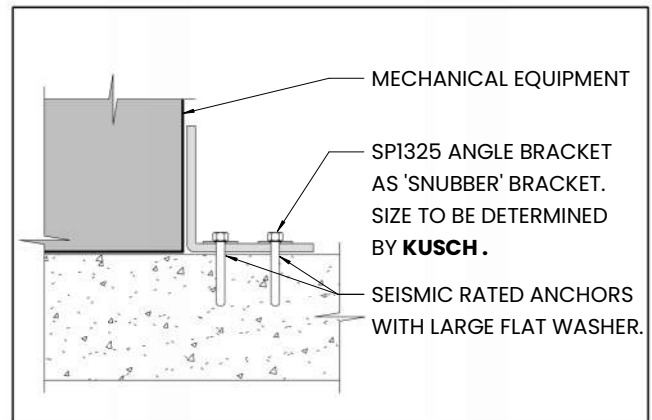
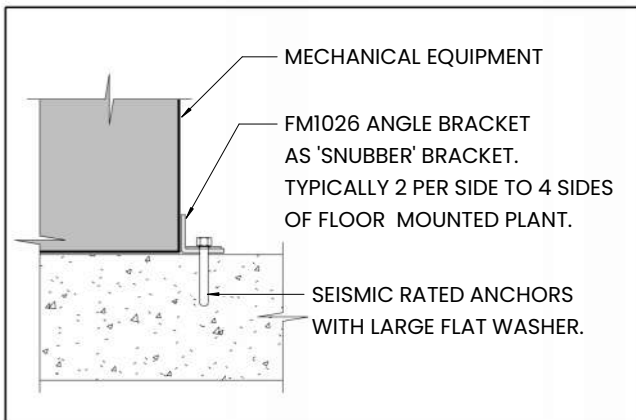
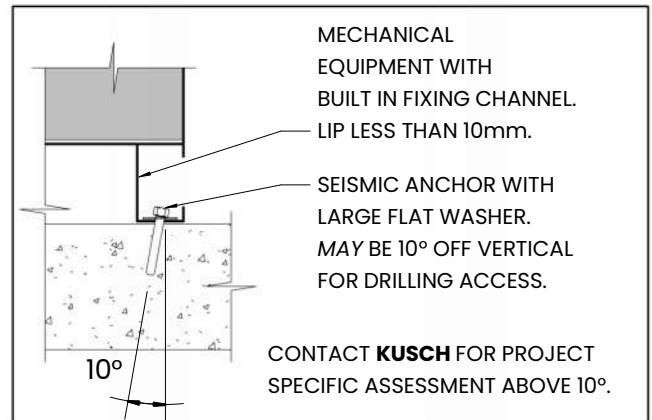
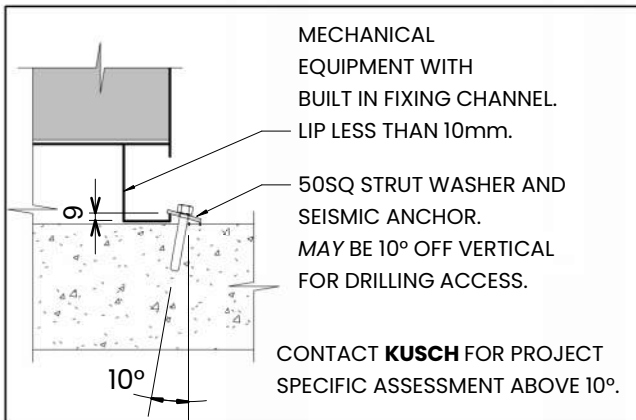


Type and size of fixings for floor mounted plant vary depending on dimensions and weight of the equipment.

Fixing design will be on a case-by-case basis.

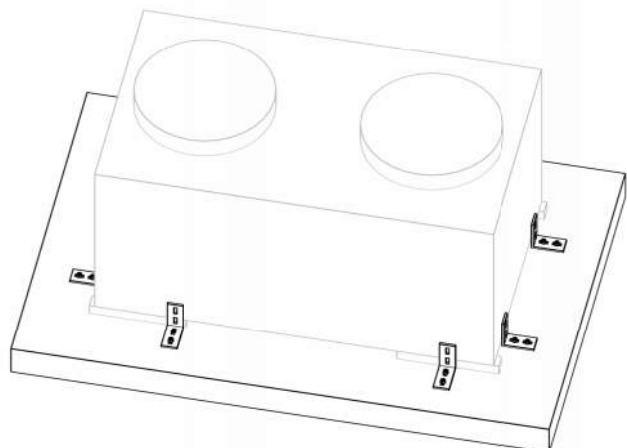
Talk to a **KUSCH** engineer for details / design.

In all cases, use seismic rated anchors and ensure there is 80mm minimum edge distance. Use spring mounts as required.



TYPICAL SNUBBER BRACKET DESIGN OPTION
2-SP80-1325 ANGLE BRACKETS PER SIDE
WITH 2-M12 SEISMIC ANCHORS EACH, TO THIS 12.5 TONNE CONDENSING UNIT.

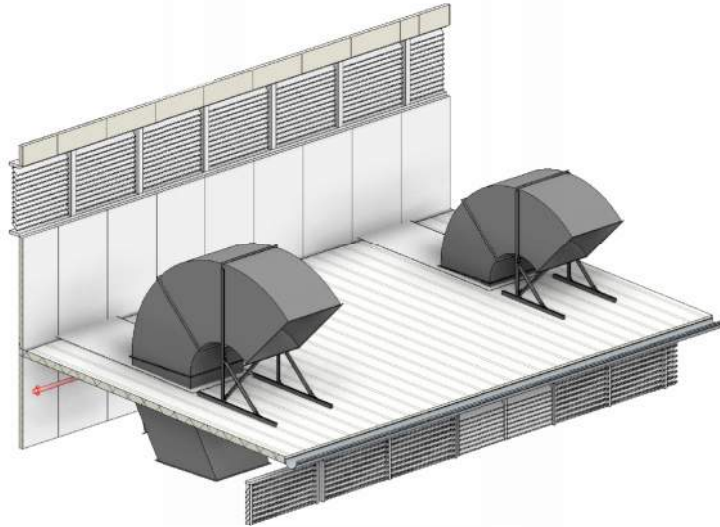
MINIMUM 80mm FIXING TO EDGE OF PLINTH.



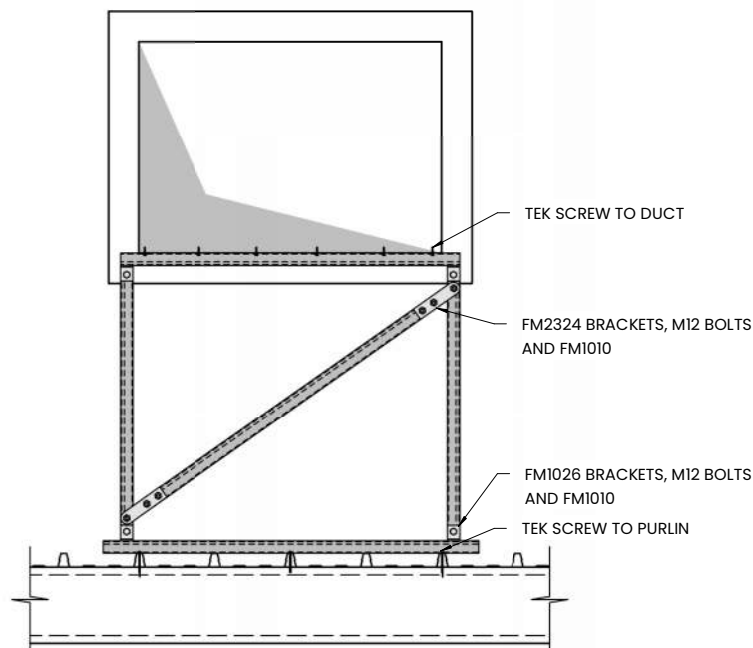
In most cases, wind will be the governing load case for roof-mounted duct & equipment.

Wind loads vary between sites. **KUSCH** will provide project specific details for your roof-mounted services.

EXAMPLES OF ROOF SUPPORT / BRACING



KUSCH ENGINEERS UTILIZE OFF-THE-SHELF PARTS WHEREVER POSSIBLE TO ENABLE EASE OF INSTALLATION WITH PRODUCTS YOU ARE FAMILIAR WITH.





KUSCH
Engineered.

w: kusch.com.au

e: design@kusch.com.au

p: 1300 10 22 30

Victoria: Head Office

36-38 Hollonds St, Mount Beauty,
Victoria 3699

Queensland

Level 10, 333 Ann St, Brisbane,
Queensland 4000

New South Wales

Level 6, 241 Commonwealth St,
Surry Hills, New South Wales 2010

Adelaide

72-76 Edmund Ave, Unley,
South Australia 5061