

# Technical Product Specifications:

# STRUT BRACKETRY

### Approval/calculation possibilities:

- AS/NZS 4600:2018
- NZS 4100:2020
- NZS1170.5:2009
- NZS 4219:2009
- NZS 4541:2020
- AS/NZS 4680:2006







# **STRUT BRACKETRY**

FDG stocks a wide range of Strut Channel Brackets, a crucial part of the modular nature of the FDG Channel System. The different brackets available allow you to create many different frames and assemblies to meet your support requirements. The Spring Nut fastening system creates a proven connection that gives strength and versatility to your build.

FDG Strut Brackets are critical for creating rigid seismic bracing assemblies. With a wide range of fixed and hinged backets available this strong and easy to install bracing systems gives you the options you require. The FDG Strut Brackets are stocked standard as Hot Dip Galvanized, however are also available in ZP, Stainless Steel or painted finishes if required.

# Advantages of using STRUT BRACKETRY

- Wide range of bracketry.
- Multiple combinations for assembly.
- Simple Spring Nut connection system.
- Easy to Install.
- Removes need for welding and drilling.









### Contents





## Spring Nut

- Safety Factor: 3
- Finishes Available: Zinc Plate, Hot Dip Galvanised, Stainless Steel SS316

Flat	Plate
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FDG1067G

- Hole Diameter: 14mm
- Hole Spacing (From End): 21mm

FDG1941G

- Hole Spacing: 48mm
- Width: 40mm

Thickness: 6mm

• Finish: Hot Dip Galvanised

Zinc Spring Nut			
Nut Type	Pullout	Slip (8.8 Bolts)	Torque
NUTM6SLSZ	2.70 kN	1.30 kN	9 Nm
NUTM8SLSZ	3.55 kN	2.20 kN	22 Nm
NUTM10SLSZ	4.45 kN	3.50 kN	44 Nm
NUTM12SLSZ	8.85 kN	6.50 kN	77 Nm

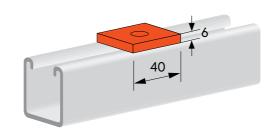


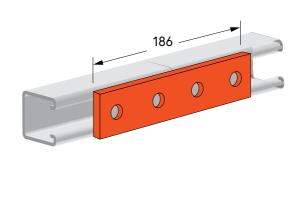
Slip testing carried out in New Zealand using 8.8 Grade Zinc Bolts.Strut Bracketing Capacity usually limited by Slip Capacity of Spring Nut.

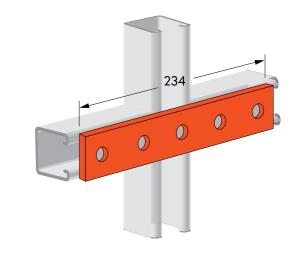


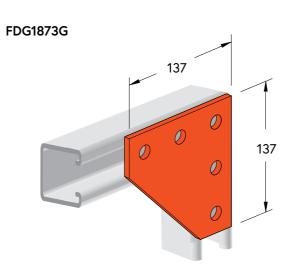
- Flat Plate
- Hole Diameter: 14mm
- Hole Spacing (From End): 21mm
- Hole Spacing: 48mm
- Width: 40mm
- Thickness: 6mm
- Finish: Hot Dip Galvanised

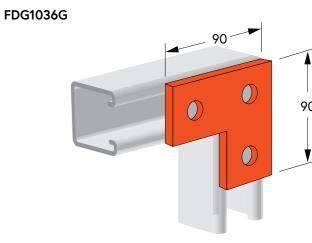
Square Plate Washers		
Code	Hole Size	
W8X40SQX6G	M8	
W10X40SQX6G	M10	
W12X40SQX6G	M12	
W16X40SQX6G	M16	



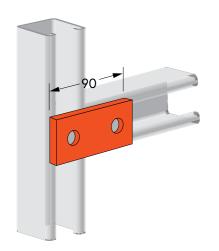




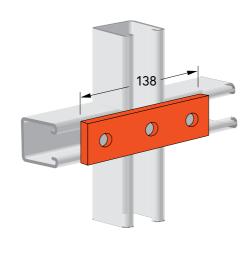




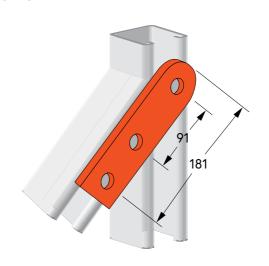
### FDG1065G



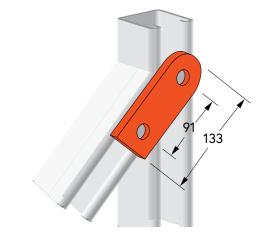




FDG2324G



FDG2325G





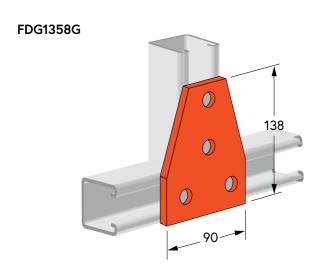


Flat Plate & 90° Angle

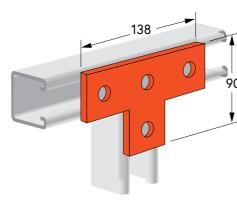
- Hole Diameter: 14mm
- Hole Spacing (From End): 21mm
- Hole Spacing: 48mm
- Width: 40mm
- Thickness: 6mm
- Finish: Hot Dip Galvanised



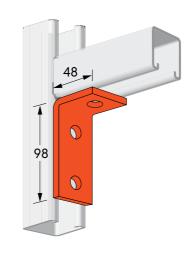
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- Hole Spacing (From End): 21mm
- Hole Spacing: 48mm
- Width: 40mm
- Thickness: 6mm
- Finish: Hot Dip Galvanised



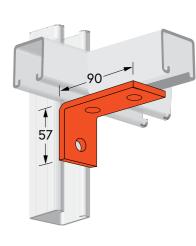
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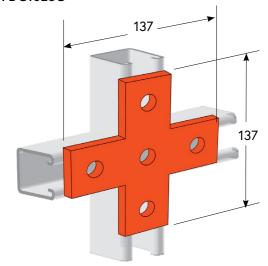
FDG1346G



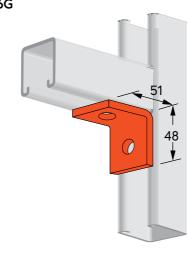
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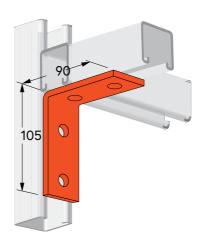




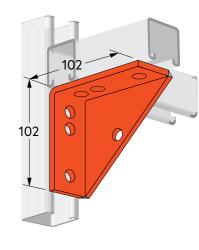
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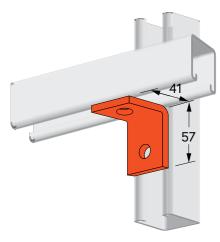
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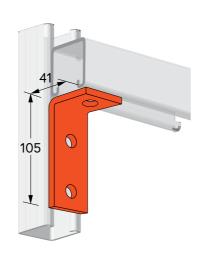
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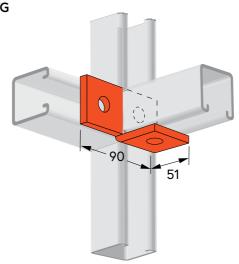
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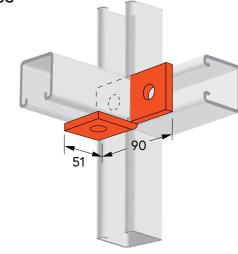
FDG1326G



FDG1037G



FDG1038G

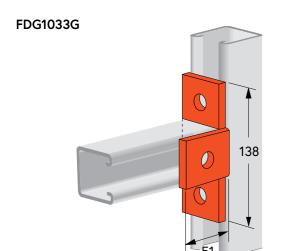




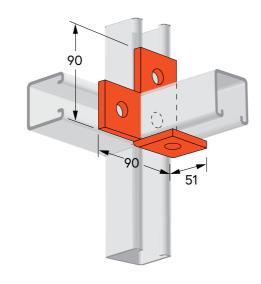


- 90° & 45° Angle
- Hole Diameter: 14mm
- Hole Spacing (From End): 21mm
- Hole Spacing: 48mm
- Width: 40mm
- Thickness: 6mm
- Finish: Hot Dip Galvanised

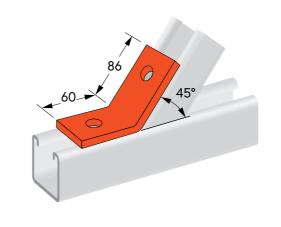
- 45° Angle
- Hole Diameter: 14mm
- Hole Spacing (From End): 21mm
- Hole Spacing: 48mm
- Width: 40mm
- Thickness: 6mm
- Finish: Hot Dip Galvanised



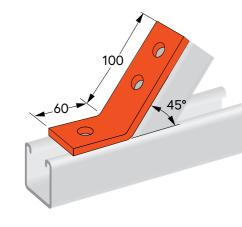
### FDG1034G



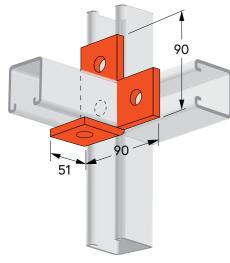
FDG1546G



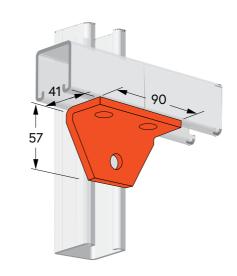
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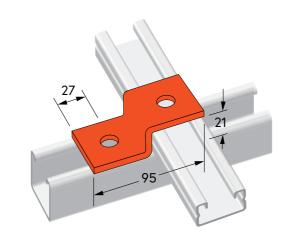




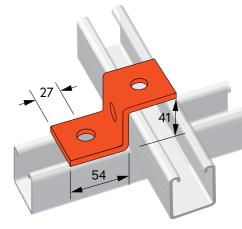
FDG1357G



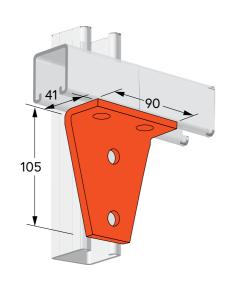
FDG4045G



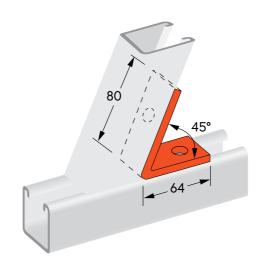
FDG1045G



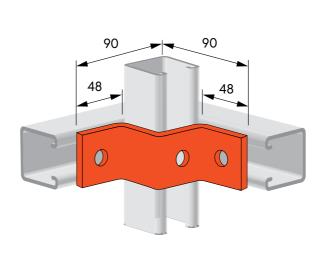
FDG1359G



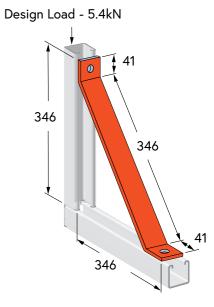
FDG1186G



FDG1736G



FDG2452G





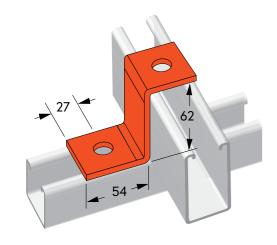


"Z", "U"

- Hole Diameter: 14mm
- Hole Spacing (From End): 21mm
- Hole Spacing: 48mm
- Width: 40mm
- Thickness: 6mm
- Finish: Hot Dip Galvanised

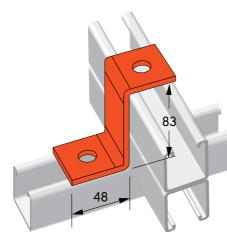
- "U" & Wing Shape
- Hole Diameter: 14mm
- Hole Spacing (From End): 21mm
- Hole Spacing: 48mm
- Width: 40mm
- Thickness: 6mm
- Finish: Hot Dip Galvanised



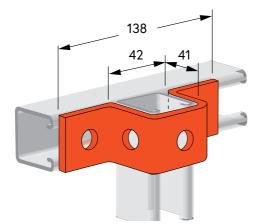


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FDG1453G

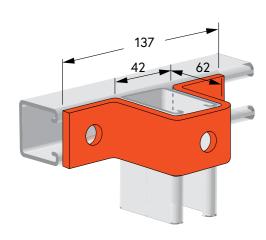


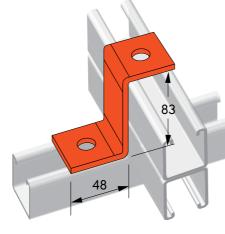
FDG1047G

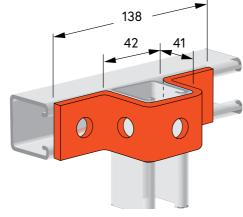


FDG5547G

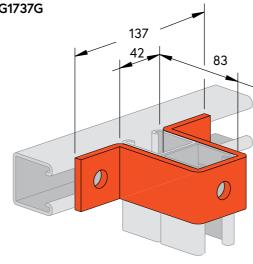
FDG4047G



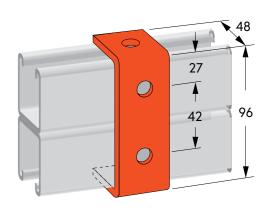




FDG1737G

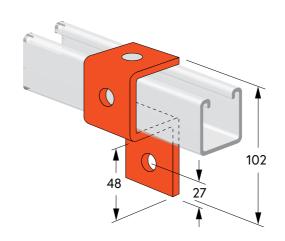


FDG1044G

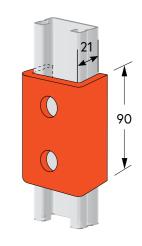


FDG1046G

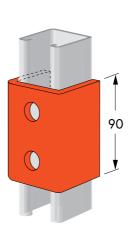
FDG2223G



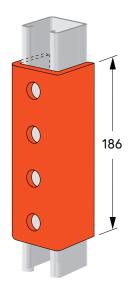
FDG4376G



FDG1376G



FDG1377G







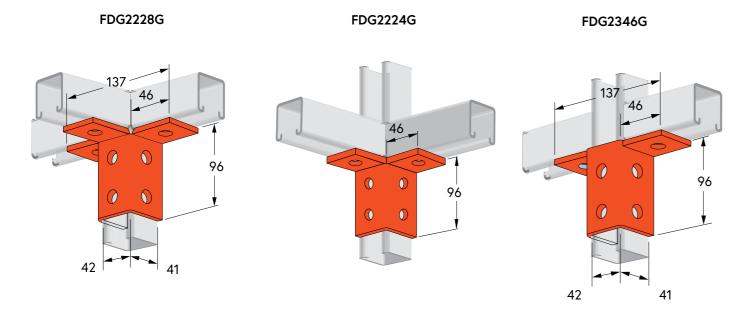
## Wing Shape

- Hole Diameter: 14mm
- Hole Spacing (From End): 21mm
- Hole Spacing: 48mm
- Width: 40mm
  - Thickness: 6mm
- Finish: Hot Dip Galvanised

### Base Plates

FDG2072SIG

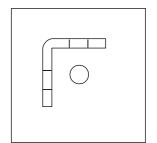
- Hole Diameter: 14mm
- Hole Spacing (From End): 21mm
- Hole Spacing: 48mm
- Width: 40mm
- Thickness: 6mm
- Finish: Hot Dip Galvanised



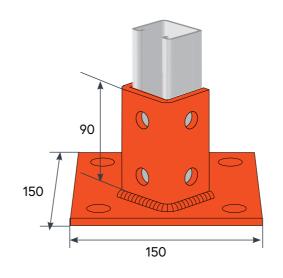
# Adjustable Brace Fittings

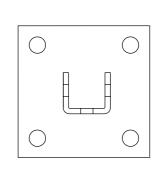
- Hole Diameter: 14mm
- Hole Spacing (From End): 21mm
- Hole Spacing: 48mm
- Width: 40mm
- Thickness: 6mm
- Finish: Hot Dip Galvanised

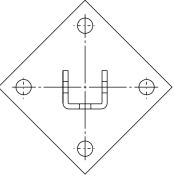
# 100



### FDG2072BG & FDG2072AG



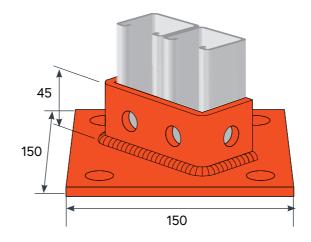


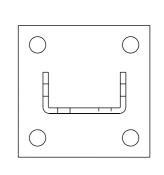


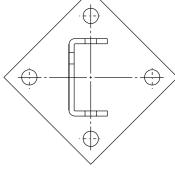
FDG2072G

FDG2072AG

### FDG2073BG & FDG2073AG

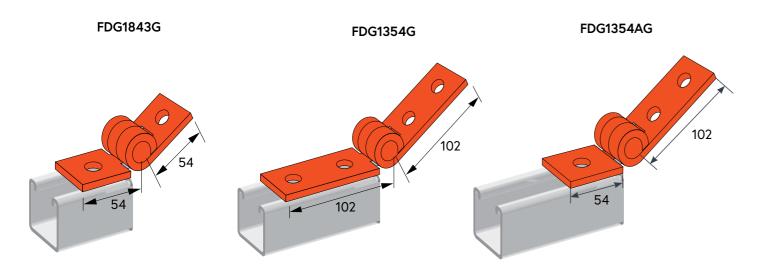






FDG2073G

FDG2073AG

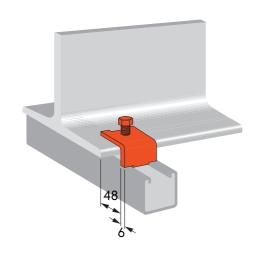




## Beam Clamps

### FDG1386G

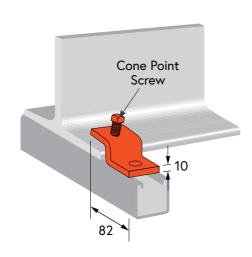
- Design Load: 2.5 kN (Using the FDG1000 channel)
- Finish: Hot Dip Galvinised



- M12 x 40 bolt and channel nut not included.
- Ensure these brackets are used in pairs.

### FDG1379G

- Design Load: 2.5 kN (Using the FDG1000 channel)
- Finish: Hot Dip Galvinised



- $M12 \times 40$  cone point screw included.
- Ensure these brackets are used in pairs.

### FDG2785G & FDG2786G

FDG2785G (Works with FDG1000 & FDG3300)

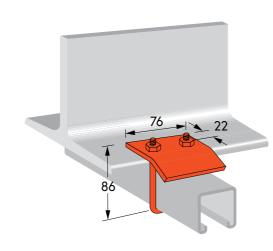
- Leg Length: 86mm
- Design Load: 4.5 kN each
- Finish: Hot Dip Galvinised

FDG2786G (Works with FDG1001 & FDG5500)

- Leg Length: 127mm
- Design Load: 4.5 kN

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• Finish: Hot Dip Galvinised

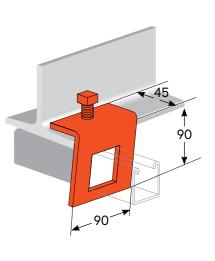


- Ensure these brackets are used in pairs.

## Beam Clamps

### FDG1796G

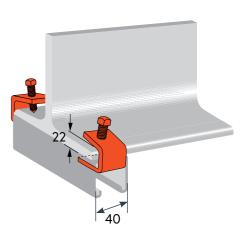
- Design Load: 2.5 kN (Using the FDG1000 channel)
- Finish: Hot Dip Galvinised



- M12 x 40 cone point screw included.
- Ensure these brackets are used in pairs.

### FDG1272G

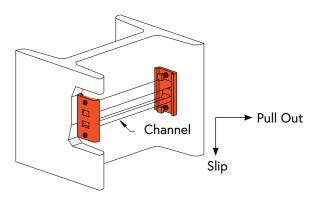
- Design Load: 2.0 kN
- Finish: Hot Dip Galvinised



- M12 x 40 cone point screw included.
- Ensure these brackets are used in pairs.

### FDG3087G

- Design Pull-out Load: 4.5 kN (Using FDG1000)
- Design Slip Load: 3.5 kN (Using FDG1000)
- Finish: Hot Dip Galvinised



- Ensure these brackets are used in pairs.
- M12 x 40 cone point screw included.





# Cantilever Brackets . Hole Size: 14mm

Code

FDGCB320G

FDGCB470G

FDGCB635G

FDGCB780G

FDGCB930G

FDGCB1080G

**Braced Cantilever Bracket** 

Length

320 mm

470 mm

635 mm

780 mm

900 mm

1080 mm

Design Load - UDL

8.81 kN

3.43 kN

3.38 kN

1.72 kN

1.47 kN

0.85 kN

• Finish: Hot Dip Galvinised

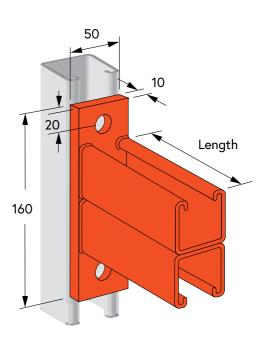
20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Length

Brace

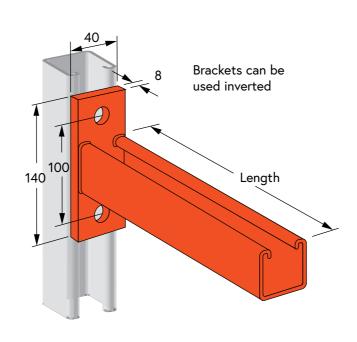
• Hole Size: 14mm

• Finish: Hot Dip Galvinised

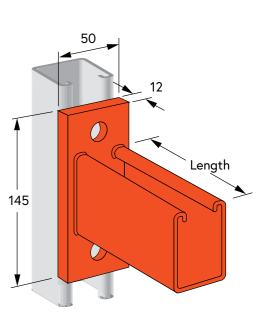
Back to Back Cantilever Bracket		
Length	Design Load - UDL	
305 mm	7.50 kN	
460 mm	5.20 kN	
610 mm	4.10 kN	
760 mm	3.20 kN	
915 mm	2.65 kN	
	Length 305 mm 460 mm 610 mm 760 mm	



Un-Braced Cantilever Bracket		
Code	Length	Design Load - UDL
FDGCBU150G	150 mm	4.85 kN
FDGCBU300G	300 mm	2.35 kN
FDGCBU450G	450 mm	1.60 kN
FDGCBU600G	600 mm	1.25 kN
FDGCBU750G	750 mm	1.05 kN
FDGCBU900G	900 mm	0.75 kN
FDGCBU1000G	1000 mm	0.55 kN



FDG5500G Cantilever Bracket		
Code	Length	Design Load - UDL
FDGCBH300G	300 mm	6.95 kN
FDGCBH450G	450 mm	4.80 kN
FDGCBH600G	600 mm	3.60 kN
FDGCBH750G	750 mm	2.90 kN
		*





Notes



Notes

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