DATA SHEET

FASTMOUNT
PANEL MOUNTING SOLUTIONS

Standard Range

PC-F2A

The PC-F2A is an extended version of Fastmount's PC-F1A self-tapping female clip, with a longer threaded body that provides 10mm of adjustment perpendicular to the substrate. Part of the Standard Range, it is installed into timber battens, plywood, composite or MDF substrates for concealed mounting of interior wall and ceiling panels in marine and architectural applications.

By threading the clip in or out of the substrate, installers can adjust individual clip positions to bring the mounting points onto the same plane. This helps compensate for uneven substrates and simplifies panel alignment, reducing the need for shims.

The PC-F2A can be installed using either the standard Fastmount toolkit socket bit or a Torx T45 bit, giving installers a choice of installation tools.

The PC-F2A allows panels to be mounted securely with no visible screws or fixings. It works with all Standard Range male clips, giving installers flexibility to choose the male clip best suited to the panel, substrate, load requirement and project conditions.



PC-F2A
STANDARD CLIP – ADJUSTABLE
SELF TAPPING FEMALE



USE WITH:



PC-M1B
STANDARD CLIP - SELF TAPPING MALE



PC-M2H
STANDARD CLIP - SELF TAPPING MALE HEAVY DUTY



PC-SM2
STANDARD CLIP - SURFACE MOUNT MALE



PC-SM2H
STANDARD CLIP - SURFACE MOUNT MALE HEAVY DUTY



PC-VM1
STANDARD CLIP - VARIO SELF TAPPING MALE 5KG/11LB



PC-VMX
STANDARD CLIP - VARIO SELF TAPPING MALE EXTRA HEAVY DUTY 15KG/33LB



PC-SVMX
STANDARD CLIP - VARIO SELF TAPPING SURFACE MOUNT MALE EXTRA HEAVY DUTY 15KG/33LB

REQUIRED TOOLS



CT-01
10MM (3/8") DRILL CARBIDE TIPPED
For drilling through substrate and creating pilot hole for CT-07.



CT-07
16.8MM (0.661") STEP DRILL CARBIDE TIPPED
For drilling through pre-drilled 10mm (3/8") hole in frame.



CT-08
Tool kit which includes the necessary tools required to install the self-tapping clips in the PC Range, including the PC-F2A (includes all tools listed above).

OPTIONAL TOOLS



CP-01ST
STANDARD RANGE CENTER POINT
Center point with stainless steel tip to align holes in panel and frame for correct clip alignment (may not be required with CNC machining or an installation template).



CT-13A
16.8MM (0.661") STEP DRILL CARBIDE TIPPED
For drilling holes into fibreglass, carbon fibre and Kevlar materials.



CT-15
THREAD TAP
Tap tool for tapping thread to fit PC-F2A into denser plywood or MDF, fibreglass, aluminium, or similar.



CT-03
INSTALL TOOL
Use to install self-tapping female clip PC-F2A using battery drill.

FEATURES



Substrate Adjustment
Compensate for uneven substrates with less need for shims, by threading clips in or out to bring mounting points onto the same plane.



Adaptability
Is compatible with a variety of different male clips, including self-tapping, glued and surface mounted clips.



Non-Sequential Removability
Offers the advantage of non-sequential removability, allowing panels to be detached in any order for greater flexibility during maintenance and adjustments.



No Top Gap Required
Allows for the removal or replacement of the top panel without leaving a gap above it, ensuring a seamless and flush fit.

APPLICATIONS

- Marine bulkheads and deckheads
- Architectural walls & ceilings
- Headboards and custom furniture

Standard Range

PC-F2A

TECHNICAL DATA



PC-F2A
MATERIAL: ACETAL PLASTIC

The following table data is based on the male clips being used in conjunction with the PC-F2A.

Model	Material	Min. Pull Out Load	Min. Shear Load
PC-M1B	Acetal	5kg (11lb)	70kg (154lb)
PC-M2H	Acetal	10kg (22lb)	55kg (120lb)
PC-VMX	Nylon	15kg (33lb)	130kg (285lb)
PC-VM1	Acetal	5kg (11lb)	95kg (210lb)
PC-SVMX	Nylon	15kg (33lb)	105kg (230lb)
PC-SM2	Acetal	5kg (11lb)	35kg (77lb)
PC-SM2H	Acetal	10kg (22lb)	60kg (132lb)

Products have been tested by a recognized international quality/assurance company. Test reports are available by request
This product has been tested up to 500 cycles while still maintaining the minimum pull out load

PC-F2A CLIP DIMENSIONS

Thread depth: 24.7mm (0.972")
Overall clip depth: 26.7mm (1.051")
Overall clip diameter: 20mm (0.787")
Required hole diameter: 16.8mm (0.661")*

**CT-07 drill bit is recommended for drilling the required 16.8mm installation hole. Not required where an accurate 16.8mm hole is CNC machined.*

PANEL GAP

The use of the PC-F2A alongside any of the male clips from the Standard Range, provides anywhere between a 4-14mm (5/32-9/16") gap between panel and frame.



Panel Weight Calculation & Clip Selection

Step 1: Identify if the panel is Wall or Ceiling mounted



For wall panels, use the calculation **below** on the next page.



For ceiling panels **go to page 5.**

Standard Range

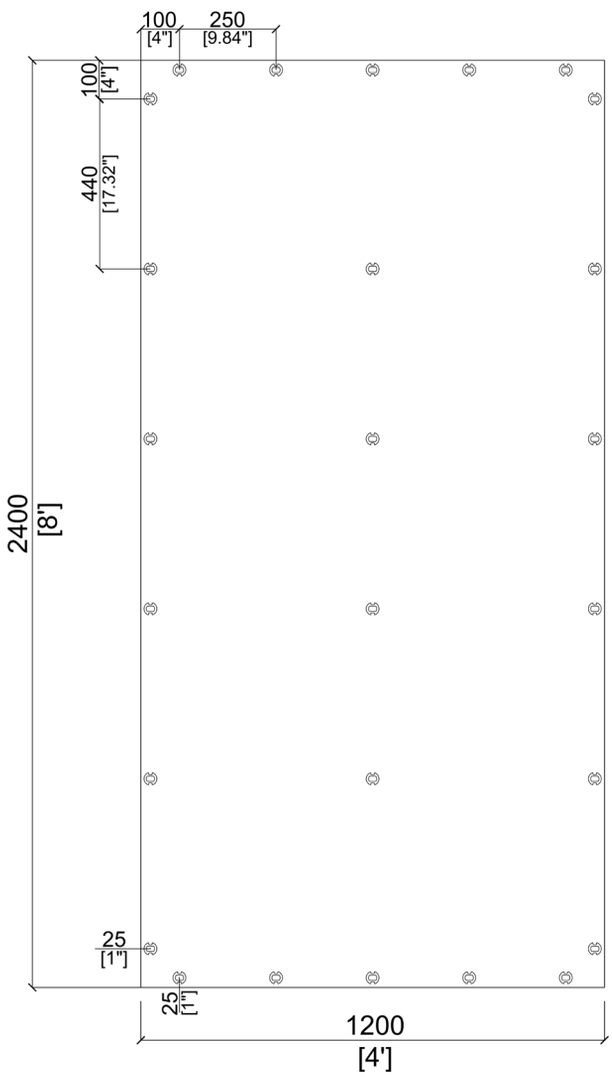
PC-F2A

WALLS

Step 2. Determine number of clips required (Walls)

The following example provides recommended clip layout and spacing guidelines for wall panels using Fastmount's PC Range. For custom panel sizes, refer to the guidelines provided in this document.

If further assistance is required, please contact the Fastmount team or your local Fastmount distributor for technical support.



GUIDELINES

Clip Positioning & Spacing

- Position corner clip centres 75–100mm (3-4") in from the left and right edges of the panel, and 25mm (1") from the top and bottom edges.
- Clip spacings, measured centre to centre, should not exceed 450mm (18") along the vertical runs, or 300mm (12") along the horizontal runs.
- Distribute clips as evenly as practical while remaining within the maximum spacing limits.
- For different panel sizes, adjust clip positions and add clips as required to remain within the maximum spacing limits.
- For panels wider than 600mm (24"), add intermediate vertical rows of clips as required to provide additional support across the panel width.

Panel Support

- Additional clips may be used where greater panel support is required.
- Lightweight, thin or flexible panels may require additional clips to minimise bowing, movement or waviness between fixing points.
- Allow for panel expansion and contraction due to moisture and environmental changes. Provide adequate clearance for movement.

Example:
Quantities per panel: 26 female + 26 male clips based on a 2400mm × 1200mm (8' x 4') wall panel.

Standard Range

PC-F2A



Step 3. Calculate the Weight per Clip (Walls)

Divide the total panel weight by the number of clip sets required.

Example:

$$\frac{\text{25kg (55lb)}}{\text{26 clip sets}} = \text{0.96kg (2.12lb) per clip}$$



Step 4: Select the Appropriate Male Clip (Walls)

Refer to the table below and select a male clip with a weight rating equal to or greater than your calculated weight per clip.

Model	Mounting Method	Max weight per clip (Walls)	
		kg	lb
PC-SM2	Glued	0.38kg	0.84lb
PC-SM2H	Glued	0.58kg	1.28lb
PC-M1B	Self-tapping	0.58kg	1.28lb
PC-VM1	Self-tapping	0.96kg	2.12lb
PC-M2H	Self-tapping	0.96kg	2.12lb
PC-VMX	Self-tapping	1.54kg	3.40lb
PC-SVMX	Screw-fixed	1.54kg	3.40lb

Select a male clip with a weight rating equal to or greater than your calculated weight per clip for the intended wall application.

The maximum total panel weight **must not exceed 40kg (88.2lb)** for wall applications regardless of the number of clips installed. Lower maximum panel weight limits may apply depending on the male clip selected.

Example:

2400mm x 1200mm (8’ x 4’) wall panel weighing 25kg (55lb) requiring 26 clips

25kg (55lb) / 26 clips = **0.96kg (2.12lb) per clip**

Model	Max weight per clip (Walls)		Suitability
PC-SM2	0.38kg	0.84lb	✗
PC-SM2H	0.58kg	1.28lb	✗
PC-M1B	0.58kg	1.28lb	✗
PC-VM1	0.96kg	2.12lb	✓
PC-M2H	0.96kg	2.12lb	✓
PC-VMX	1.54kg	3.40lb	✓
PC-SVMX	1.54kg	3.40lb	✓

Standard Range

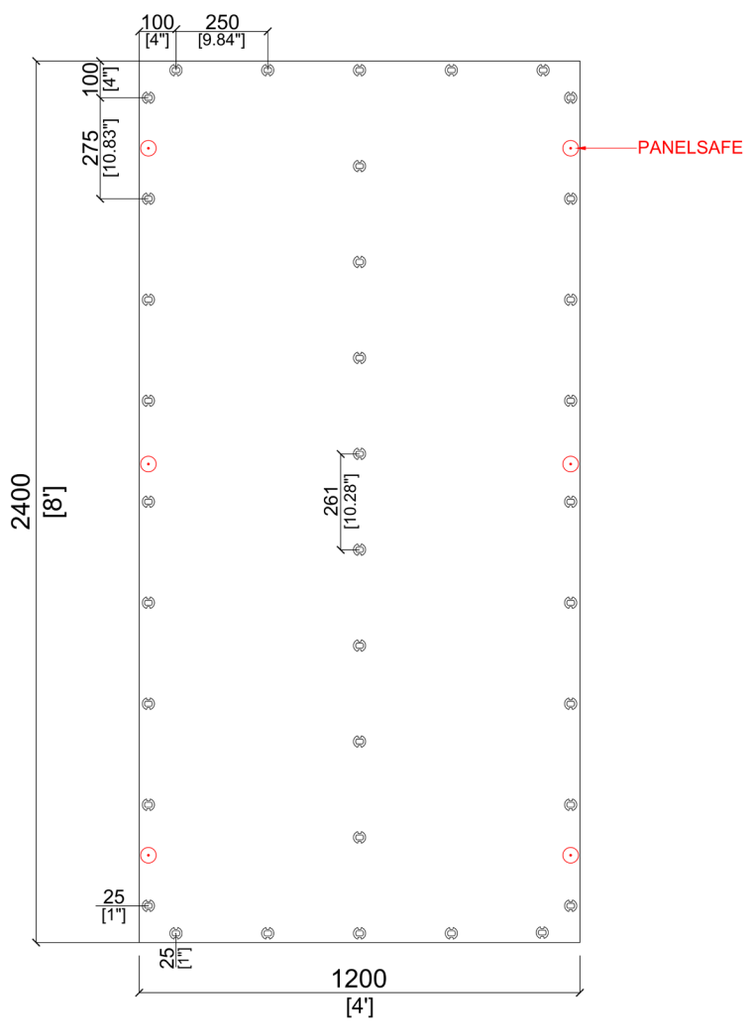
PC-F2A

CEILINGS

Step 2. Determine number of clips required (Ceiling)

The following example provides recommended clip layout and spacing guidelines for ceiling panels using Fastmount's PC Range. For custom panel sizes, refer to the guidelines provided in this document.

If further assistance is required, please contact the Fastmount team or your local Fastmount distributor for technical support.



GUIDELINES

Clip Positioning & Spacing

- Position corner clip centres 75–100mm (3–4") in from the left and right edges of the panel, and 25mm (1") from the top and bottom edges.
- Clip spacings, measured centre to centre, should not exceed 300mm (12").
- Distribute clips as evenly as practical while remaining within the maximum spacing limits.
- For different panel sizes, adjust clip positions and add clips as required to remain within the maximum spacing limits.
- For panels wider than 600mm (24"), add intermediate vertical rows of clips as required to provide additional support across the panel width.

Panel Support

- Additional clips may be used where greater panel support is required.
- Lightweight, thin or flexible panels may require additional clips to minimise bowing, movement or waviness between fixing points.
- Allow for panel expansion and contraction due to moisture and environmental changes. Provide adequate clearance for movement.
- PanelSafe restraints are recommended for heavier ceiling panels or where controlled panel removal is required.

Example:
Quantities per panel: 36 female + 36 male clips based on a 2400mm × 1200mm (8' x 4') ceiling panel.

Standard Range

PC-F2A



Step 3. Calculate the Weight per Clip (Ceilings)

Divide the total panel weight by the number of clip sets required.

Example:

$$\frac{\text{20kg (44lb)}}{\text{36 clip sets}} = \text{0.55kg (1.21lb) per clip}$$



Step 4: Select the Appropriate Male Clip (Ceilings)

Refer to the table below and select a male clip with a weight rating equal to or greater than your calculated weight per clip.

For ceilings, we only recommend the PC-M1B and PC-M2H – all other male clips in the PC Range are not recommended for ceiling panels.

Model	Mounting Method	Max weight per clip (Ceilings)	
		kg	lb
PC-M1B	Self-tapping	0.29kg	0.64lb
PC-M2H	Self-tapping	0.83kg	1.83lb

Select a male clip with a weight rating equal to or greater than your calculated weight per clip for the intended ceiling application.

The maximum total panel weight **must not exceed 30kg (66.1lb)** for ceiling applications regardless of the number of clips installed.

Example:

2400mm x 1200mm (8’ x 4’) ceiling panel weighing 20kg (44lb) requiring 36 clips

20kg (44lb) / 36 clips = 0.55kg (1.21lb) per clip

Model	Max weight per clip (Ceilings)		Suitability
	kg	lb	
PC-M1B	0.29kg	0.64lb	✘
PC-M2H	0.83kg	1.83lb	✓

Standard Range

PC-F2A

INSTALLATION OPTIONS

PC-F2A

The PC-F2A can be seamlessly integrated and installed onto wall and ceiling substrates including timber battens, plywood, composite and MDF.

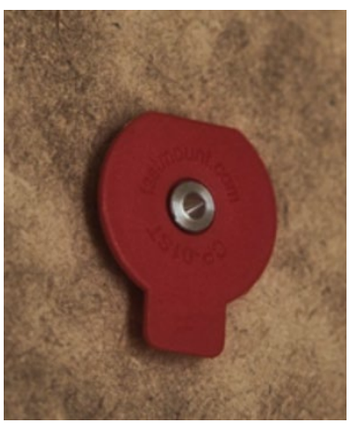
The PC-F2A provides up to 10mm (0.394″) of in/out adjustment, allowing the clip to be extended from the substrate to compensate for uneven surfaces and help achieve a consistent panel plane.

Dense substrates may require pre-tapping with the Fastmount CT-15 tap to reduce installation resistance and allow easier installation of the PC-F2A.

CENTER POINTS

The CP-01ST center points can be used in conjunction with the PC-F2A to mark the center points for the corresponding male clip.

The center points are inserted into the PC-F2A female clips. The panel is then pushed against the center points, marking the center points for the Standard Range male clips, to help ensure correct alignment between female and male clips.



INSTALLATION GUIDELINES

- Ensure male and female clips are correctly aligned to achieve proper engagement.
- Ensure clips are not recessed too deeply or obstructed, as this may prevent full male and female clip engagement.
- It is critical that all clips are installed level and on the same plane to ensure correct clip engagement, panel alignment and installation performance. Where required, use the PC-F2A's depth adjustment to compensate for uneven substrates and bring clips into alignment on the same plane.

ENVIRONMENTAL CONSIDERATIONS

- Allow for panel expansion and contraction where required, taking into account the panel and substrate material and expected environmental conditions.
- Avoid excessively large or tightly butt-jointed panels where significant expansion and contraction may occur.

Standard Range

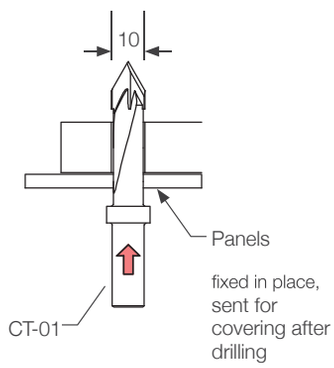
PC-F2A

INSTALLATION STEPS

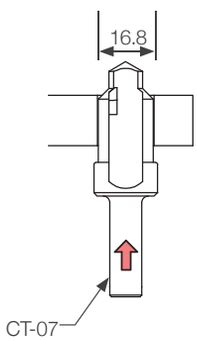
The below installation step guide covers the installation of the PC-F2A and corresponding male clips.

INSTALL PC-F2A

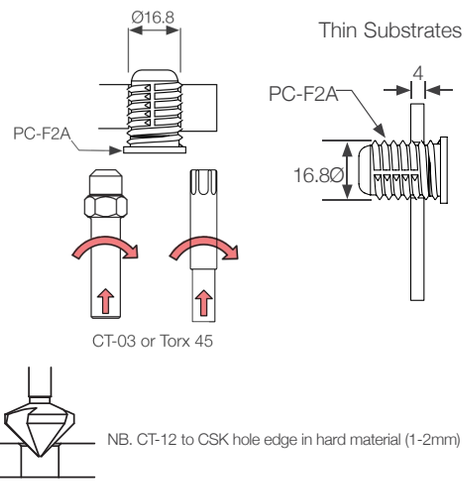
1 Drill hole through panel and frame



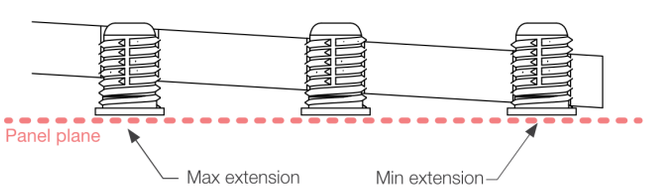
2 Drill out frame hole with CT-07



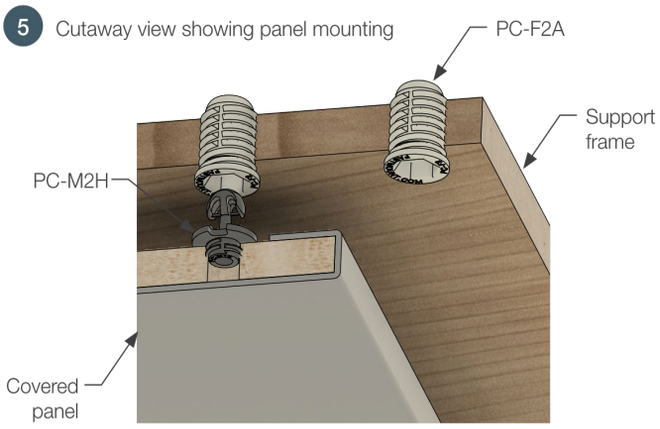
3 Screw fit PC-F2A with CT-03. Use battery drill with clutch set.



4 Use the stroke of the PC-F2A to compensate for variations in the substrate



5 Cutaway view showing panel mounting



REMOVING PANELS

Fastmount also provide panel removal tools which can help make the removal of panels easier.



CT-05
Stainless steel removal tool, for removing panels. Requires a minimum gap of 3mm (0.12”).



CT-05H
Stainless steel removal tool with fold down hook, for use with lacquered and/or textured panels. Hook requires a minimum gap of 1mm (0.04”).



Suction cup sucker tool, for removing heavier panels or painted/pre-finished panels. Two required for controlled panel removal.