

ELLIS MOUNTING FIXINGS RECOMMENDATIONS – LIMITATIONS AND ASSUMPTIONS

Ellis' mounting fixing recommendations depend on the cleat type (and mounting style – if applicable), structure type and thickness, and desired fixing material being supplied to Ellis. The supply of the aforementioned details allow Ellis to understand site/project requirements and make their best recommendation. In absence of this information Ellis assumes a generic configuration, as given below:

Cleat Mounting Style: If the required cleat has multiple mounting options (see below) Ellis will assume the strongest option is required.

Structure Type: A standard plate with a hole (nut and bolt style attachment)

Structure thickness: 10mm

Fixing material: A4 stainless steel

NOTE: Any details that Ellis assume may not reflect the actual configuration on site and as such the fixing configuration may not be correct.

LIMITATIONS

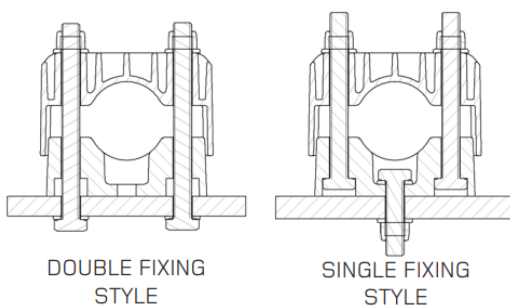
- 1) The fixing configurations recommended assume that there is little to no vibration to consider. If nut loosening from heavy vibration is a concern, please contact Ellis for further guidance.
- 2) The fixings recommended do not consider any galvanic corrosion effects. It may be the case that cleats require insulation plates to mitigate the onset of galvanic corrosion. Contact Ellis for more details.
- 3) Ellis cannot be held responsible for any assumptions made by itself or provided by another party that do not reflect actual site conditions.
- 4) Fixings sold as part of a pre-set KITS are only sold in multiples of 100. Itemised fixings may be supplied in bulk boxes of approximately 100 units or bagged separately in smaller quantities, depending on the order size. Ellis reserves the right to pack the fixings by an alternative means if required.

FOR FULL DETAILS ON THE PARAMETERS CONSIDERED IN SELECTING MOUNTING FIXINGS SEE THE BELOW SUPPLEMENTARY INFORMATION

1) **CLEAT TYPE** - The type and part number of the cleat type which is required for your cable – refer to product data sheet for guidance.

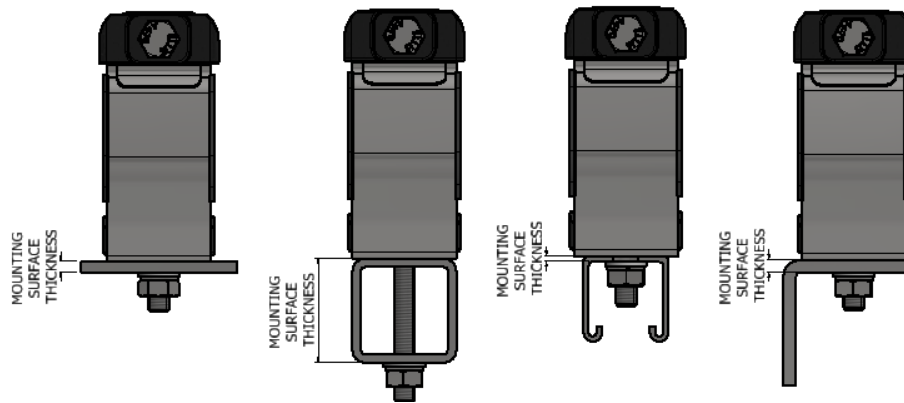
1b) **FIXING CONFIGURATION (CERTAIN CLEAT TYPES ONLY)** – Certain cleat types have different mounting hole options, see below example. For cleats where there are multiple options the product data sheets have additional details if required.

SOLUS FIXING EXAMPLE

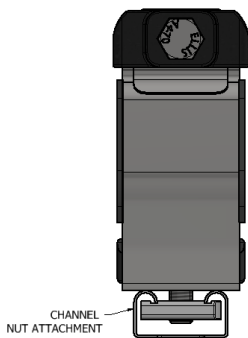


2) **MOUNTING STYLE AND STRUCTURE THICKNESS** – The mounting style is typically one of two options, a standard nut and bolt configuration (i.e. through a plate). For this option the mounting surface thickness is required in order to specify the set screw length. The second fixing option is a channel nut attachment for fastening into the open side of standard channel sections. See following examples.

STANDARD NUT AND BOLT OPTION



CHANNEL NUT OPTION



FOR CHANNEL NUT OPTIONS WITH THE VULCAN+ AND EMPEROR CLEATS ELLIS' TIME SAVING 'TWIST FOOT' PRODUCT IS AVAILABLE. SEE PRODUCT PAGES FOR MORE DETAIL:

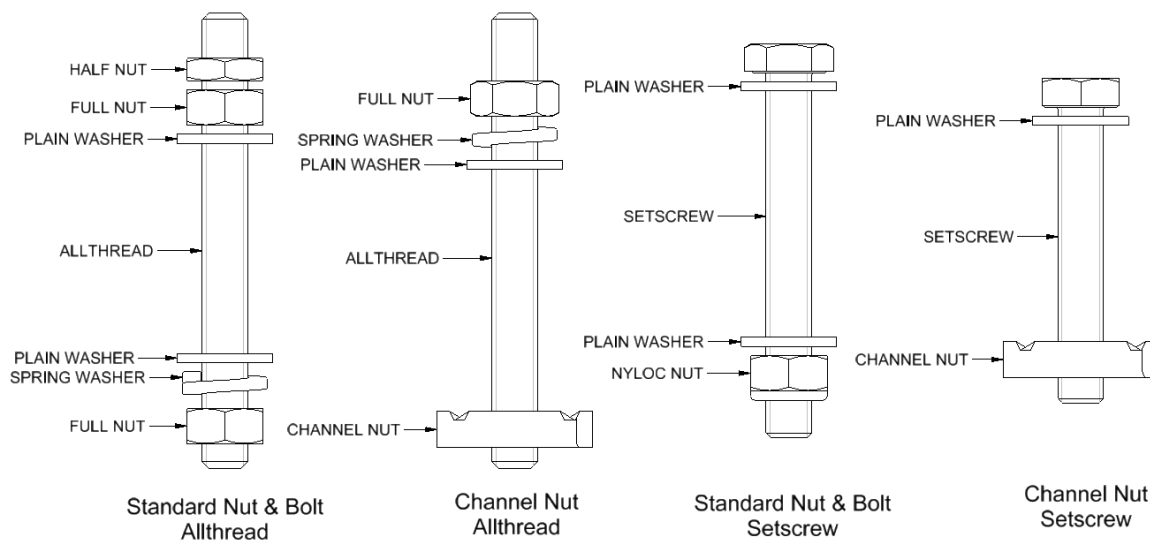
- [VULCAN+ TWIST FOOT](#)
- [VULCAN+ QUAD TWIST FOOT](#)
- [EMPEROR TREFOIL TWIST FOOT](#)
- [EMPEROR SINGLE TWIST FOOT](#)



3) FIXING MATERIAL – As standard Ellis offer two fixing material options. A4 stainless steel is suitable for most environments and is particularly used in harsh environments (e.g. coastal locations). Zinc plated fasteners are generally not suitable for outdoor use but are suitable for most non-corrosive indoor sites. Galvanised fixings can be made available on request but they are typically a non-stock item.

FIXING RECOMENDATION

The fixing configuration recommended by Ellis depends on the input but generally they should fall into the below 4 recommendations:



The fixings are typically supplied to the below specification:

| FIXING TYPE | SPECIFICATION |
|---------------|---|
| Set Screws | DIN 933 |
| All Thread | DIN 976-1, DIN 975 |
| Plain Washer | DIN 125-A |
| Spring Washer | DIN 127 |
| Full Nut | DIN 934 |
| Half Nut | DIN 936 |
| Channel Nut | Channel nut to suit open Unistrut style channel |

Note: The above specifications are for guidance only, Ellis reserves the right to source fixings of alternative specifications if necessary.