

Chirmorie Cairn

Client Name: BT

Contractor: Mitie

Project Value: £53,150.00

Scope of Work: Helicopter-assisted installation of a 40m ATS1301 tower at Glen Creran in two phases: landing the bottom three sections in four lifts on Day 1 and completing the top four sections in four lifts on Day 2.

Challenges:

- **Time-Intensive Process:** Securing splice plates traditionally requires significant manual effort and extended installation time, creating delays in project schedules.
- **Extensive Use of Temporary Steelwork:** The need for temporary steelwork to support the splice plates during installation added complexity, required additional resources, and elevated the risk of errors or accidents on-site.
- **Complexity in Tower Configurations:** The original splice design was not adaptable to taller or more complex tower structures, limiting its applicability across various tower types and heights.



Chirmorie Cairn

Client Name: BT

Contractor: Mitie

Project Value: £53,150.00

Scope of Work: Helicopter-assisted installation of a 40m ATS1301 tower at Glen Creran in two phases: landing the bottom three sections in four lifts on Day 1 and completing the top four sections in four lifts on Day 2.

Solutions:

- **Redesigned splice plates** into flanges welded directly to the tower leg ends, removing the need for temporary steelwork.
- **The new flange design** was first implemented for the 35m //A-F ATS1301 tower and later extended to the 40m //A-G tower at Glen Creran, with applicability to multiple splice configurations (G-H, H-I, and I-Stub) for taller and more complex tower designs.



Chirmorie Cairn

Client Name: BT

Contractor: Mitie

Project Value: £53,150.00

Scope of Work: Helicopter-assisted installation of a 40m ATS1301 tower at Glen Creran in two phases: landing the bottom three sections in four lifts on Day 1 and completing the top four sections in four lifts on Day 2.

Results

- **Faster Installation:** Reduced assembly time by 50% taking just 2 days to complete.
- **Improved Safety:** Eliminated temporary steelwork, reducing on-site risks.
- **Adaptability:** Suitable for multiple tower designs and heights.
- **Structural Integrity:** Maintained full equivalent splice capacity.



Chirmorie Cairn

Client Name: BT

Contractor: Mitie

Project Value: £53,150.00

Scope of Work: Helicopter-assisted installation of a 40m ATS1301 tower at Glen Creran in two phases: landing the bottom three sections in four lifts on Day 1 and completing the top four sections in four lifts on Day 2.

