

Building Construction

APPLICATION NOTE



Creating Composite-Steel Structures By Connecting Steel Beams To Concrete Slabs With NELSON® Shear Connectors

Create composite steel-concrete structures that can withstand heavy loads and vibrations is key to ensure the structural stability, load-bearing capacity, and fire resistance of any buildings. Shear connectors are a critical component in the construction of any steel and concrete building. They are used to connect steel beams to concrete slabs, creating a composite structure that is stronger and more stable than a steel or concrete structure alone.

Main Challenges

- Ensure structural stability, reducing the risk of structural failure due to lateral forces.
- Secure load-bearing capacity, helping the transfer of significant loads from wind, seismic and dead loads between steel beams and concrete slabs.
- Resistance to fire, composite structures have increased durability.

NELSON® Solutions

Shear Connectors (SD,S3L)

- Headed anchors
- M6 M25 range*

Equipment

- Nelweld 4000
- Nelweld 6000
- N800i & N1500i

Accessories

Ferrules, chucks, feet, grips, welding guns







Foundations



Shear Walls



Floors & Roofs

product availability may vary depending on the region and material requested.