

Installation Guide

Ancon SSTC/STC Steel-to-Concrete Balcony Connector

Ancon SSTC/STC balcony connectors are quick and easy to install. Allowing for phased construction, the system consists of two components: a cast-in anchorage and a fabricated bracket with thermal plate.

Cast-in Anchorage



Bracket/Thermal Plate Section



Balcony



Contact us immediately if you have any questions regarding correct installation.



Scan the code to watch an installation video.

1. Nail the assembly to the formwork. The end of the reinforcement cage should be supported on spacers or tied to adjacent slab reinforcement. Fix secondary reinforcement (consult technical literature and project drawings for details) and cast concrete. Allow to cure and strike formwork.

2. Remove and discard plastic plugs from couplers and nylon nuts from bracket. Offer up thermal plate and then the fabricated bracket. Labels on the connector identify the balcony and concrete slab side, as well as the orientation of the connector. Install the four stainless steel setscrews and washers, and hand tighten. Tighten to the correct torque using a calibrated torque wrench according to the table below. The thermal plate is now sandwiched between the bracket and the concrete.

Connector	Stainless Steel Setscrew	Tightening Torque
SSTC/STC16A	M16, Length 40mm	170Nm
STC20A	M20, Length 50mm	305Nm
STC24A	M24, Length 60mm	530Nm

3. Offer up the steel balcony and connect to the SSTC/STC bracket with the four galvanised hex head setscrews as follows:

• The top bolts should have the two galvanised square plate washers over the plain slots in the SSTC/STC connector

• The bottom bolts should have the two galvanised serrated washers over the serrated slots in the SSTC/STC connector, orientated to mate and not turned at an angle or installed using the plain side

• Four galvanised washers are provided for the balcony side of the connection, however if the balcony is slotted a plate washer should be used

• The balcony should be levelled vertically using the adjustment provided by the vertical slots in the connector

• In order to guarantee adequate positioning of the balcony steelwork, care must be taken to ensure that the concrete face is vertically level. Should the concrete face be out of plumb, full face tapered shims should be used between the bracket and thermal plate for angular adjustment. We can advise if necessary.

• Adjustment should not be made between the connector and the thermal break or between the thermal break and the concrete slab edge

• Hand tighten the four connection bolts and then torque using a calibrated torque wrench, referencing the table below:

Connector	Galvanised Hex Head Setscrew	Tightening Torque
SSTC/STC16A	M16, Length 60mm	170Nm
STC20A	M20, Length 75mm	325Nm
STC24A	M24, Length 90mm	565Nm

Health & Safety: SSTC/STC cast-in anchorage assemblies and brackets are intended solely for the connection of balconies and should under no circumstances be used for other purposes such as the temporary support or restraint of scaffolding and access platforms; such intended use could result in accidental failure leading to injuries or death.

The Construction applications and details provided in this guide are indicative only. In every case installation should be entrusted to appropriately qualified and experienced persons. Normal handling precautions should be taken to avoid physical injury. The company cannot be held responsible for any injury as a result of using our products, unless such injury arises as a result of our negligence.

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