

Eastern Green Limited

Revised 23.10.19

8-16 Newton Street, Manchester

External cleaning, repair and re-roofing

Methodology and Specification for Access Scaffold

Read in conjunction with -

Drawing Number NSR 19-06-10 Site key plan

Drawing Number NSR 19-06-04 Elevation drawings

Drawing Number NSR 19-06-11 Elevation drawings – approx. tie positions

Construction Management Plan

Method Statement – Access Scaffolding

- Scaffold is required for –
 - External inspection
 - Roof edge protection
 - External repairs
 - External cleaning
 - External redecoration
- The design of all scaffolding to be in accordance with the recommendations of BS 5973 : 1990 "Code of Practice for access and Working Scaffold and special scaffold staircases in Steel" or as updated.
- A tied independent scaffold – 5 & 2 – is proposed 2.0m lifts. First lift approx. 5.4m above street level. Monarflex sheeting above first floor and brick guarding to eaves level.
- No scaffolding shall be commenced on site until the Contractor's proposals have been submitted and agreed with the Architect/Structural Engineer. Agreement of the Contractor's proposals does not relieve the Contractor of his responsibilities to ensure full compliance of all requirements.

ERECTION REQUIREMENTS

- No steel component (including capped tubes) is to be in contact with the fabric of the building except where specific approval has been given.

- Where it is necessary to brace the scaffold from the masonry then timber packing of a minimum thickness of 20mm is to be placed between the scaffolding and the masonry.
- No scaffolding shall rest on any roof coverings unless agreed in writing prior to commencement.
- The ends of ALL scaffold tubes are to be protected with plastic caps which are to be fitted prior to delivery to site. Where it is necessary to cut scaffold tubes during erection the end is to be re-capped immediately.
- Scaffold tubes are not to encroach within 200mm of the surface of the building except where required for support or stabilising. This is to prevent accidental damage to the fabric by minor movement of the scaffold.
- Scaffold to be affixed to the existing structure using 'self-tapping screws' Maximum tie spacing – 1 x tie per 16.0 sqm

Maximum 4.0m between tie lines (tied at alternate lifts)

Maximum 4.0m horizontal distance between vertical tie lines

Tied at the top lift at ledger-braced standards

Excalibur 12mm self-tapping screws – see data sheet attached
fixed into mortar joint 'T's – no fixings into full bricks – no fixings into stonework.

SUPERVISION

- The Contractor is to exercise particular care in supervising the erection and dismantling of the scaffold to ensure that no damage occurs to the fabric of the building.
- It should be noted that in many instances damage to the historic fabric cannot easily be rectified. Any damage to the scaffold use, erection or dismantling will be rectified at the Contractor's expense.

SECURITY

- All external scaffolding shall be designed and erected so as to prevent unauthorised access by sheeting (whether ply or steel) to a minimum height of 2.4 metres.
- First boarded lift will be at approx. 5.4m above street level.

- Scaffold will be accessed from upper floor windows. No scaffold access is required from street level.

PROTECTION

- The first boarded lift over pavements is to be double boarded with visqueen between boarded layers.
- The Contractor is to satisfy all requirements of the Local Authority and Highways department.
- All surfaces at ground level are to be suitably protected to prevent the scaffold damaging existing external finishes.
- Ensure any architecture features or areas prone to damage are suitably protected.

DISMANTLING

- Ensure all necessary care is taken to ensure that no damage occurs to the fabric of the building.
- Carefully remove self-tapping screws from brick joints and make good fixing holes in lime mortar. **Sample repair to be approved by MCC Planning prior to removal of scaffolds**
- Scaffold tubes should be carefully lowered to ground level and not thrown or dropped.

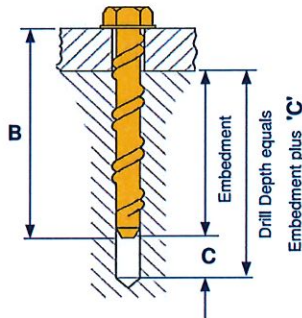
CERTIFICATES

- Copies of all handover certificates issued by the scaffolding sub-contractor shall be forwarded to the Architect upon receipt by the Main Contractor.
- No scaffolding shall be used unless handover certificates and test certificates have been issued.

Excalibur Screwbolt Data

12mm

Screwbolt Fixing Details



Drill Bit Diameter

Concrete & Brick	12.0mm
Soft Materials	11.0mm
Clearance Drill Diameter	15.0mm

Screwbolt Head Styles & Dimensions

Flange Hexagon	HSB	19mm A/Flats Hexagon Flange Diameter 25mm	
Eyebolt	EYB	EYB 12/120 25mm Internal Diameter Safe Load on eye 16.11 kN	
Hexagon Socket Dome	DSA	25mm Head Diameter 10mm A/Flats Hex. Drive	
Hexagon Socket Countersunk	HSA	28mm Head Diameter 10mm A/Flats Hex. Drive	
Hookbolt	HYB	22mm Internal Diameter Safe Load on hook 8.33 kN	
Eyebolt	EYB	22mm Internal Diameter Safe Load on eye 16.11 kN	
Studbolt	SSB	8mm A/Flats Hexagon Drive M12 Metric Thread	

Hexagon - Hook - Eye - Studbolt

Type Number.	Head Style	Max. Fixing Thickness A (mm)	U/Head Length B (mm)	Clearance Depth C (mm)	Metric Thread M (mm)	Stud Length L (mm)	Box Quantity
HSB 12/075	Hexagon Head	20	75	24	-	-	50
HSB 12/100	Hexagon Head	46	100	24	-	-	50
HSB 12/150	Hexagon Head	96	150	24	-	-	50
EYB 12/075	Eye Bolt	-	75	24	-	-	25
HYB 12/075	Hook Bolt	-	75	24	-	-	25
SSB 12/100	Stud Bolt	-	100	24	30	100	50

Tamperproof - Hexagon Drive Countersunk and Dome Heads

HSA 12/075	Countersunk Head	20	75	24	-	-	50
HSA 12/100	Countersunk Head	46	100	24	-	-	50
HSA 12/150	Countersunk Head	96	150	24	-	-	50
DSA 12/075	Dome Head	20	75	24	-	-	50
DSA 12/100	Dome Head	46	100	24	-	-	50
PL/12 Plug	For converting HSA & DSA Screwbolts into TAMPERPROOF ANCHORS						50

HYB, EYB, SSB, CSB, DSA, HSA & HSB Ultimate & Safe Load Characteristics based on 3:1 ratio

Material		Embedment Depth	Tensile Load kN.		Shear Load kN.	
			Ultimate	Safe	Ultimate	Safe
Concrete	60 N/mm ²	60mm	38.70	12.90	-	-
		90mm	69.00	23.00	59.80	19.93
	30 N/mm ²	60mm	26.50	8.83	-	-
		90mm	43.00	14.33	59.80	19.93
Engineering Brick	100 N/mm ²	45mm	20.00	6.67	-	-
Semi-Engineering Brick	70 N/mm ²	45mm	15.00	5.00	-	-
Fletton	20 N/mm ²	45mm	15.80	5.27	-	-
Butterfly	20 N/mm ²	45mm	5.10	1.70	-	-
Hemelite	3.5 N/mm ²	75mm	12.10	4.03	-	-
Topcrete	7.0 N/mm ²	75mm	18.90	6.30	-	-

For Edge distances see page 10