

UAC SOLIDPANEL
IBS SYSTEM SERIES

UAC SolidPanel



UAC SolidPanel is a lightweight precast solid-infilled sandwiched wall panel system using UAC fibre cement sheets to provide a solid structure and superior quality wall-finishes to ensure a straight and smooth wall after completion.

UAC SolidPanel conforms to the Uniform Building By Laws Malaysia and has gone through the most stringent wall performance test by SIRIM Malaysia and TUV PSB in Singapore. It is also certified as a Full-Scored Industrial Building System (IBS Factor 1.0) by CIDB Malaysia.

UAC SolidPanel complies with the fire rating, soundproofing, and thermal insulation requirements. It eliminates the need for plastering and skim coating, thus involving fewer skilled workers on site and improving site safety and cleanliness due to its quick and easy installation steps.

UAC SolidPanel is suitable for use in different types of buildings (hospitals, schools, high-rise & modular buildings, etc.) as partitions, internal and external walls, fencing, and more.

BENEFITS



Involves fewer skilled workers on site



Fire rating up to 2 hours to 4 hours



Allows for fast-track construction



Good thermal resistance



Durable



Lightweight (Density of 600-700kg/m^3)



Heavy-duty impact resistant



Good sound insulation (Up to STC 55dB)



Strong anchorage capacity



Factor 1.0

UAC SolidPanel is a solid, smooth-surfaced panel for constructing high-quality walls. It is easy to install, improves site safety and cleanliness, and requires fewer skilled workers on site.

SYSTEM SPECIFICATIONS

To supply & install UAC SolidPanel T75/T100:

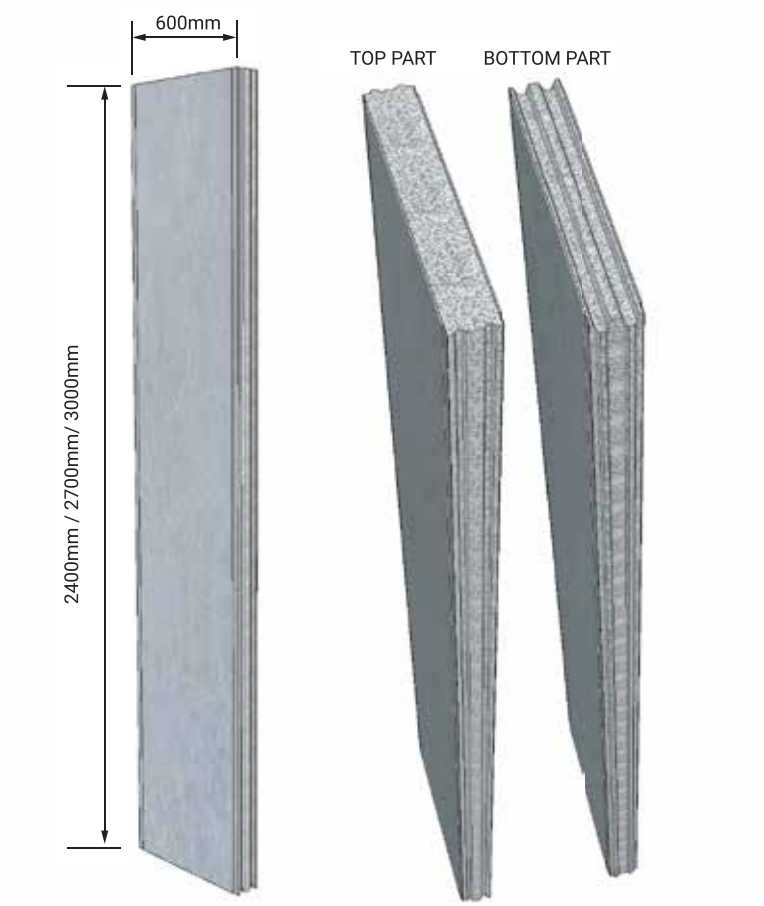
L-angle method: Fix 38mm × 38mm × 150mm × 2mm thick L-angle bracket to top support and 2400mm × 64.6mm × 0.75mm (for T75) or 2400mm × 91.4mm × 0.75mm (for T100) bottom track.

Top track method: Fix 77mm × 48.5mm × 1mm × 2400mm (for T75) or 102mm × 48.5mm × 1mm × 2400mm (for T100) top track and 2400mm × 64.6mm × 0.75mm (for T75) or 2400mm × 91.4mm × 0.75mm (for T100) bottom track.

All joints are to be sealed with UAC-approved high-strength cement adhesive (refer to manufacturer's method statement) and flush-jointed with perforated paper tape or fibre mesh netting and UAC Jointing Compound as per manufacturer's specifications.

Windows and door openings require to be fixed with Lintel Brackets. All termination joints between reinforced concrete or steel structures and SolidPanel must be sealed with approved equivalent modified sealant. All to be fixed in accordance to the manufacturer's or Superintendent Officer's recommendation.

SYSTEM COMPONENTS & SPECIFICATIONS



CERTIFICATIONS

- Fire Rated 2 & 4 Hours
  Test Report
  BS 476 : Part 22 : 1987
- Sound Insulation
  ISO 10140-2 : 2010
- Thermal Insulation
  ISO 8990 : 1994
- Performance Test
  BS 5234 : Part 2 : 1992
- Load Bearing Test
  Compression Test ASTM
  ASTM E72-15

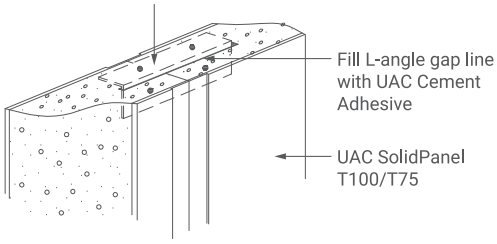
DIMENSIONS

	Width (mm)	Thickness (mm)	Length (mm)	Weight (kg/m^2)	Fire Rated (hours)	Density (kg/m^3)
UAC SolidPanel T75	600	75	2400, 2700, 3000	55	2 (single layer) 4 (double layers)	600 - 700
UAC SolidPanel T100	600	100	2400, 2700, 3000	70	2 (single layer) 4 (double layers)	600 - 700

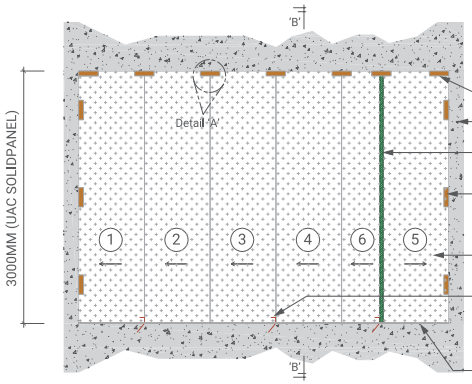




Top Track:
L-angle 38 × 38 × 2mmt/ L-angle 50 × 50 × 2mmt/
150mm length at centre UAC SolidPanel jointing

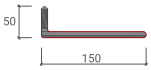


DETAIL 'A'

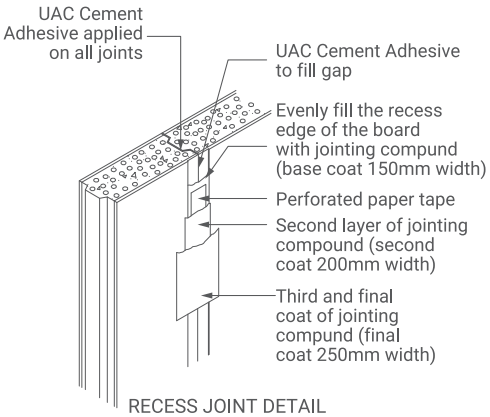


Top Track:
L-angle 38 × 38 × 2mmt/50 × 50 × 2mmt/150mm length at centre UAC SolidPanel jointing
RC Column/Masonry wall (by others)
Filling gap refer to the table
L-angle 38 × 38 × 2mmt/50 × 50 × 2mmt/150mm length @ 1000mm c/c for UAC SolidPanel joint with column/masonry wall
UAC SolidPanel T100/T75
Fix R8 Hook dowel bar:
1. For Landed: Fix every 2 pcs of UAC SolidPanel
2. For High Rise: Fix every 4 pcs of UAC SolidPanel
Bottom track with RAMSET nail or equivalent@ 600mm c/c

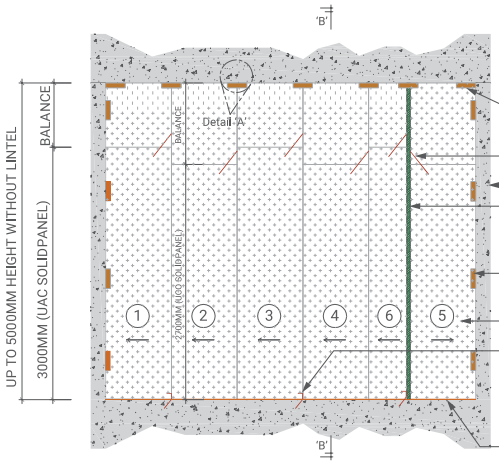
FRONT ELEVATION



HOOK DOWEL BAR DETAIL

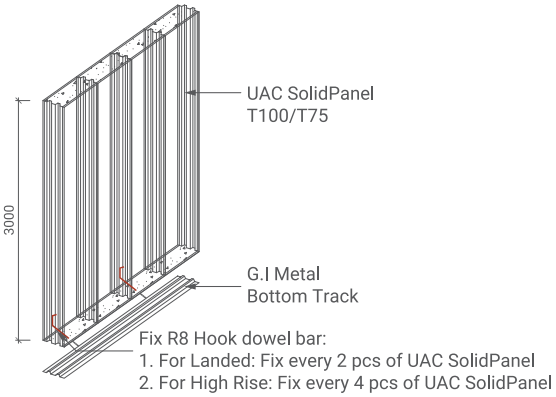


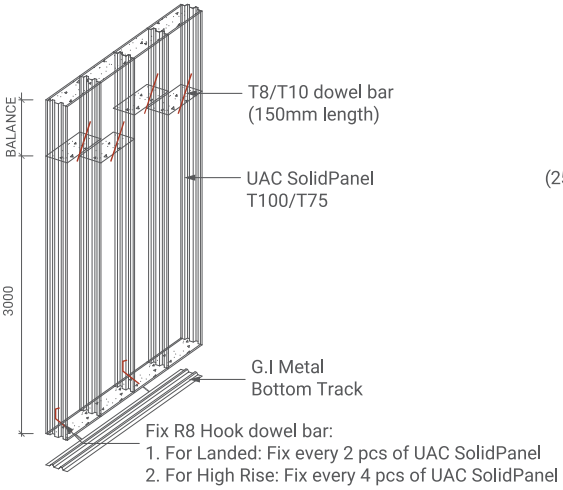
RECESS JOINT DETAIL

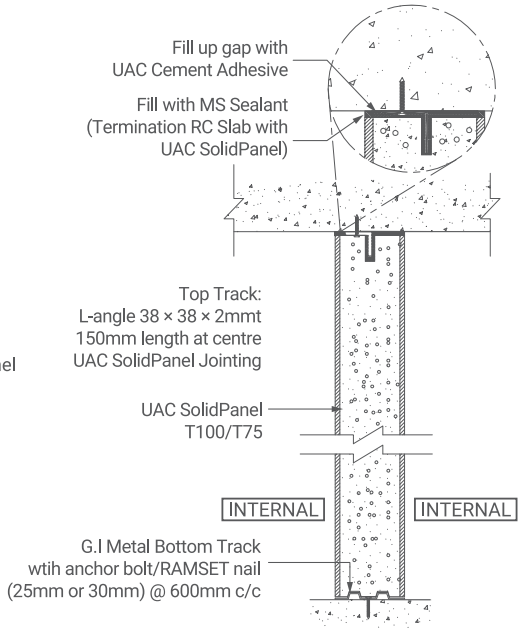


Top Track:
L-angle 38 × 38 x 2mmt/L-angle 50 × 50 × 2mmt/
150mm length at centre UAC SolidPanel jointing
T8/T10 dowel bar (150mm length)
RC Column/Masonry wall (by others)
Filling gap (refer to the table)
L-angle 38 × 38 × 2mmt/50 × 50 × 2mmt/150mm length @ 1000mm c/c for UAC SolidPanel joint with column/masonry wall
UAC SolidPanel T100/T75
Fix R8 Hook dowel bar:
1. For Landed: Fix every 2 pcs of UAC SolidPanel
2. For High Rise: Fix every 4 pcs of UAC SolidPanel
Bottom track with RAMSET nail or equivalent@ 600mm c/c

FRONT ELEVATION

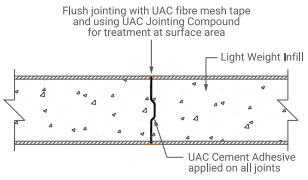




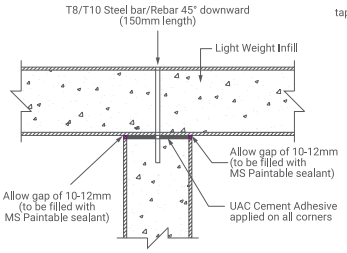


SECTION 'B-B'
INTERNAL AREA

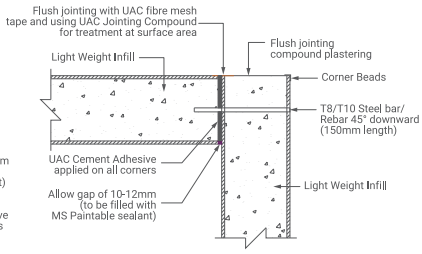
GAP WIDTH (MM)	METHOD TO FILL PANEL TO GAP
< 25mm	UAC Cement Adhesive
26mm - 100mm	CEMENT GROUT + UAC Cement Adhesive - Apply cement grout around 75mm thickness (for T100 UAC SolidPanel) - Apply cement grout around 55mm thickness (for T75 UAC SolidPanel) - Apply UAC Cement Adhesive on surface after curing of cement grout (1 day)
101mm >	UAC SolidPanel



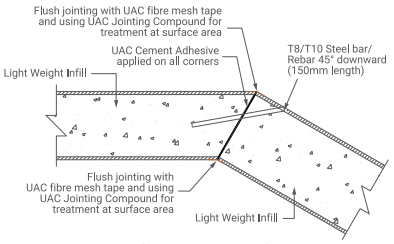
CONNECTION DETAILS



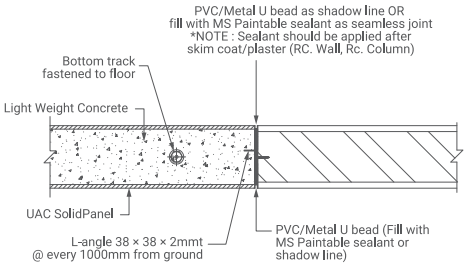
INTERSECTION DETAILS



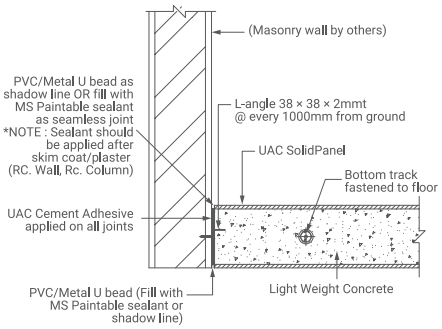
CORNER DETAILS



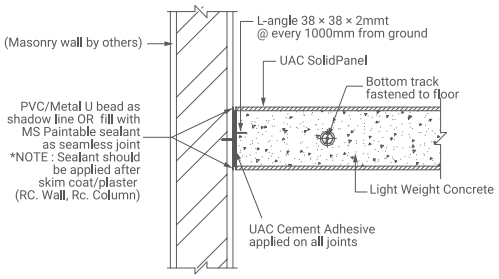
ANGLED WALL DETAILS



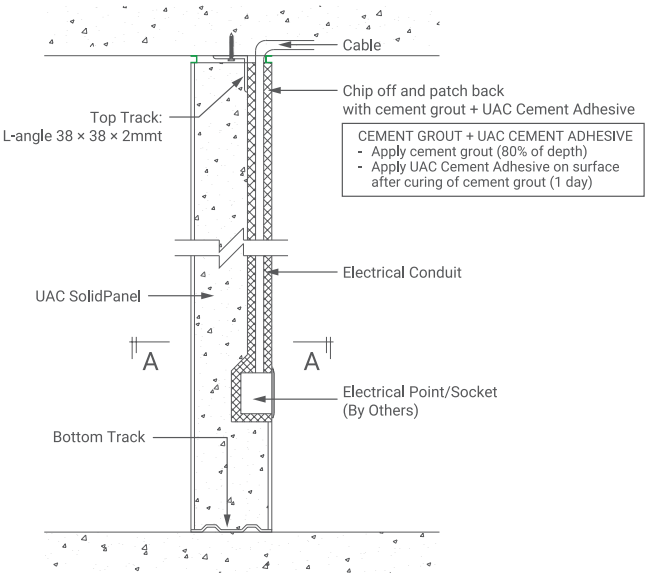
JOINT WITH MASONRY WALL DETAIL



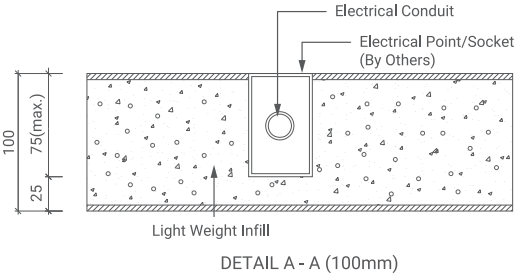
JOINT WITH MASONRY WALL DETAIL



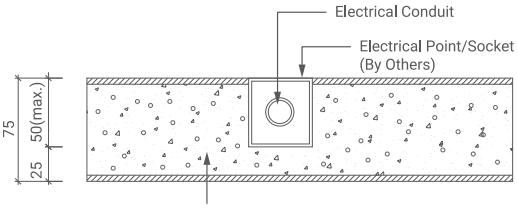
JOINT WITH MASONRY WALL DETAIL



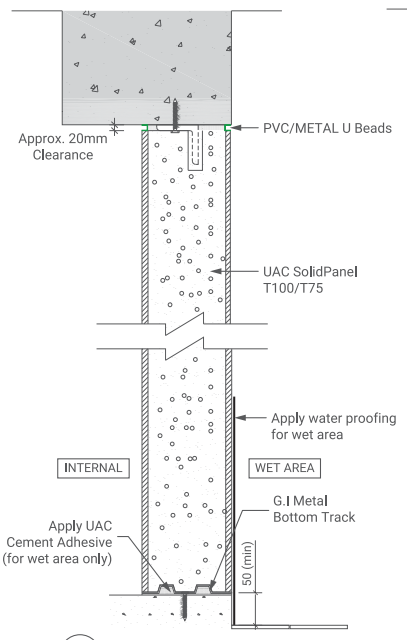
UAC SOLIDPANEL - Electrical Point



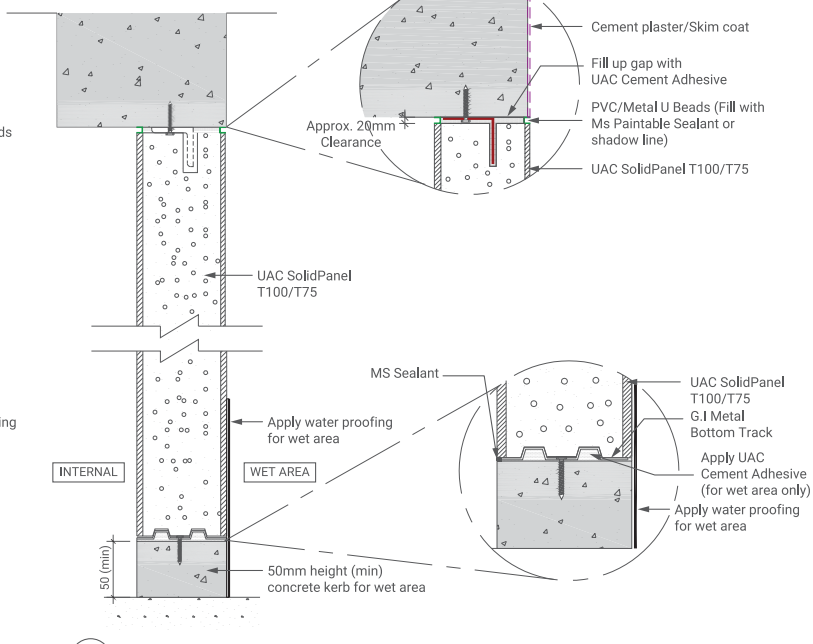
DETAIL A - A (100mm)



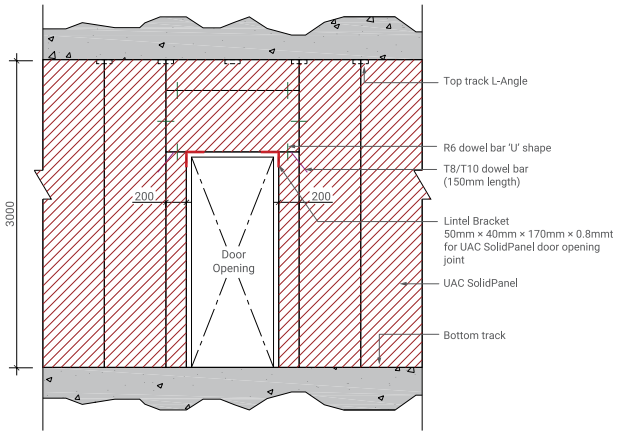
DETAIL A - A (75mm)



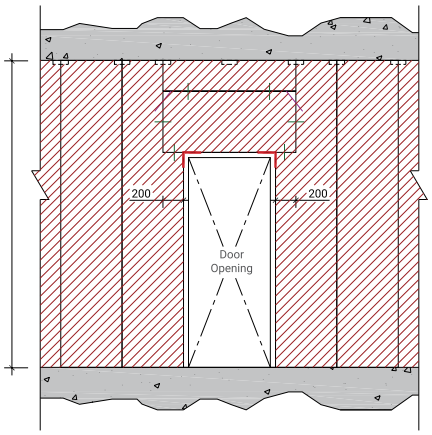
1 SECTION - WET AREA



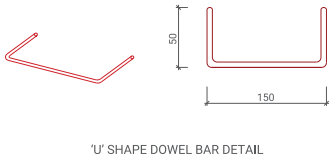
2 SECTION - WET AREA



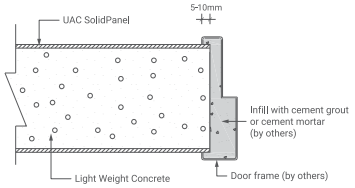
UAC SOLIDPANEL - TYPICAL DOOR FRAME INSTALLATION (OPTION 1)



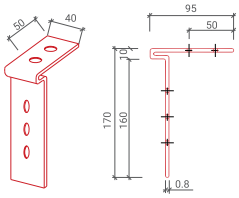
UAC SOLIDPANEL - TYPICAL DOOR FRAME INSTALLATION (OPTION 2)



'U' SHAPE DOWEL BAR DETAIL

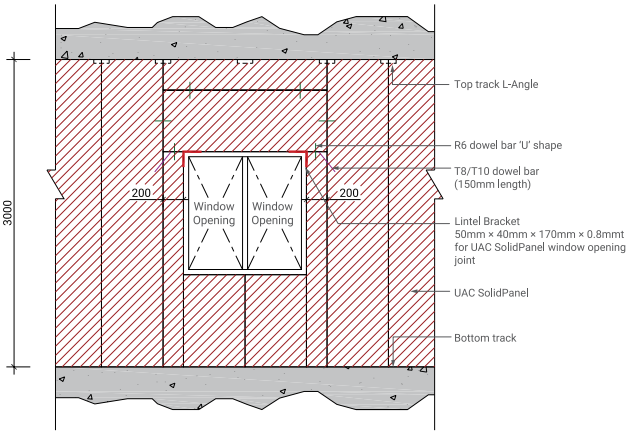


DOOR FRAME INSTALLATION

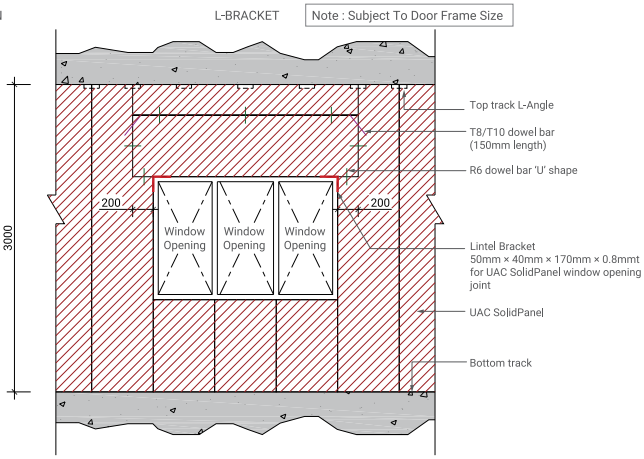


L-BRACKET

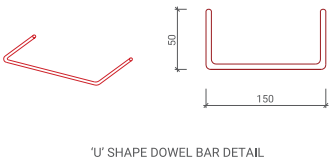
Note : Subject To Door Frame Size



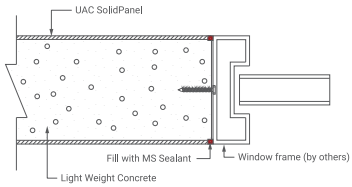
UAC SOLIDPANEL - TYPICAL WINDOW FRAME INSTALLATION (OPTION 1)



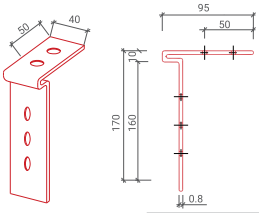
UAC SOLIDPANEL - TYPICAL WINDOW FRAME INSTALLATION (OPTION 2)



'U' SHAPE DOWEL BAR DETAIL



SECTION DETAIL



L-BRACKET

Note : Subject To Window Frame Size

STATHEROS Chemical & Mechanical Anchoring Fixing Guide with UAC Solid Panel

Anchors	LIGHT TO MEDIUM DUTY FIXING						
	Anchor Size	Drill Hole Dia. (mm)	Embedment Depth (mm)	Screw/Bolt Diameter (mm)	Tensile (kN)	Shear (kN)	Description
Statheros WP Nylon Wing Plug	M8 × 40	8	40	6	0.11	0.06	
	M10 × 50	10	50	8	0.19	0.09	
Statheros EAC80	MEDIUM TO HEAVY DUTY FIXING						
	300ml Vinylester Styrene Free Resin	10	55	8	2.52	1.00	
		12		10	2.67	2.50	
		14		12	3.00	3.50	
Statheros EPC80	650ml Pure Epoxy Resin	10		8	2.67	1.00	
		12		10	3.00	2.50	
		14		12	3.00	3.50	

*Note: * Above tested to the maximum capacity of 75mm UAC SolidPanel * Safety Factor 3.0 for WP Nylon Wing Plug * Safety Factor 1.5 for EAC80 & EPC80 * Rod by others*

Anchors	LIGHT TO MEDIUM DUTY FIXING						
	Anchor Size	Drill Hole Dia. (mm)	Embedment Depth (mm)	Screw/Bolt Diameter (mm)	Tensile (kN)	Shear (kN)	Description
Statheros WP Nylon Wing Plug	M8 × 40	8	50	6	0.11	0.06	
	M10 × 50	10	60	8	0.26	0.09	
	M12 × 60	12	70	10	0.37	0.10	
Statheros EAC80	MEDIUM TO HEAVY DUTY FIXING						
	300ml Vinylester Styrene Free Resin	10	75	8	2.82	1.00	
		12		10	3.67	2.50	
		14		12	4.33	3.50	
Statheros EPC80	650ml Pure Epoxy Resin	10		8	4.00	1.00	
		12		10	5.33	2.50	
		14		12	5.67	3.50	

*Note: * Above tested to the maximum capacity of 75mm UAC SolidPanel * Safety Factor 3.0 for WP Nylon Wing Plug * Safety Factor 1.5 for EAC80 & EPC80 * Rod by others*

A Member of Boustead Group

UAC BERHAD
196301000271 (5149-H)

SALES OFFICE
Level 10, Menara UAC, No. 12, Jalan PJU 7/5, Mutiara Damansara,
47800 Petaling Jaya, Selangor Darul Ehsan, Malaysia.
Tel: +603 7721 9393 **Fax:** +603 7721 9300 **Email:** sales@uac.com.my

@uacberhad www.uac.com.my uacberhad

SIRIM ECO-LABEL
Eco-Friendly Fibre Cement Flat Sheets
SIRIM ECO 021 : 2010
Certification No.: EL000022

SIRIM
Certified to BS 476 : PART 6 : 1989 + A1 : 2009
BS 476 : PART 7 : 1997
Certification No.: LU 001801

SIRIM
Certified to MS 1296 : 2010
Certification No.: PU 001804

SIRIM
Certified to NEN-EN 12467 : 2004
Certification No.: PU 001808

SIRIM
Certified to MS ISO 45001 : 2018
Certification No.: OHS 00295

SIRIM
Certified to MS ISO 9001 : 2015
Certification No.: QMS 00199

SIRIM
Certified to MS ISO 14001 : 2015
Certification No.: 00752

Copyright @ 2023. UAC Berhad. All rights reserved.