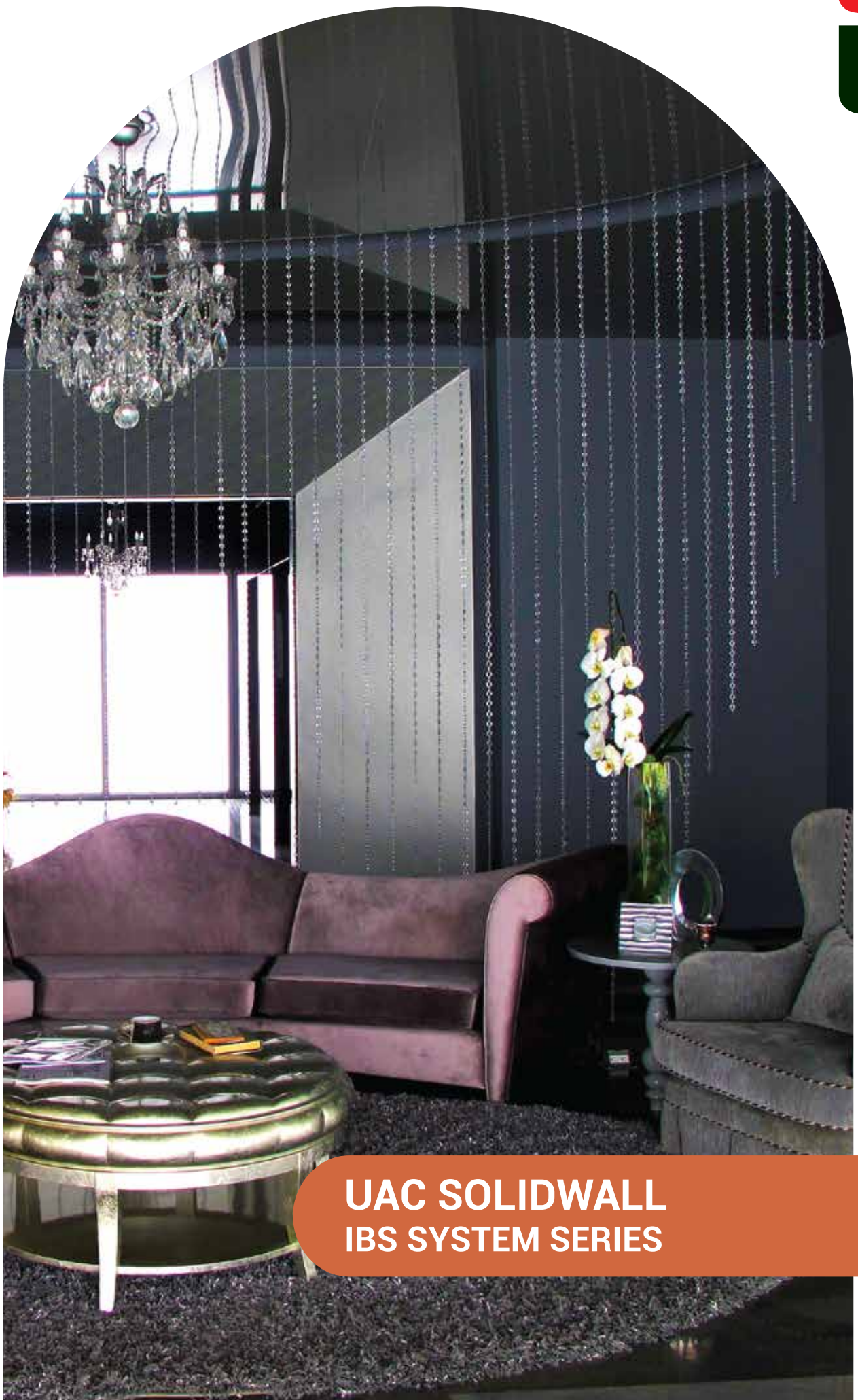


# UAC SOLIDWALL
## IBS SYSTEM SERIES

# UAC SolidWall



UAC SolidWall is a solid, cast in-situ, non-load-bearing, and certified IBS wall system with an IBS factor of 0.7 that fits into modern-day commercial, institutional, and residential building construction.

UAC SolidWall comprises of UAC fibre cement sheets fixed onto metal studs and infilled with lightweight cement. It complies with the requirements for thermal insulation, wet area applications, and impact strength.

UAC SolidWall system can be designed for strong wind loading areas and high wall applications. UAC SolidWall reduces the building's total structural cost and increases useable spaces without compromising on the wall properties.

UAC SolidWall is certified by Bomba Malaysia (Fire and Rescue Department of Malaysia) to have a fire rating up to 4 hours and an earthquake resistance up to 6 $M_L$ on the Richter scale.

## SYSTEM SPECIFICATIONS

**To supply & install UAC SolidWall system:**

Use 6mm/9mm-thick UAC Vistabord or UAC Flexabord on both sides. Fix onto 0.75mm-thick G.I. metal studs at 610mm c/c max. System completes with lightweight cement infill.

All joints are to be flush-jointed with perforated tape and UAC jointing compound.

All termination joints between RC or steel structures and SolidWall must be sealed with approved equivalent modified sealant. All to be fixed in accordance to the manufacturer's or Superintendent Officer's recommendation.

## BENEFITS

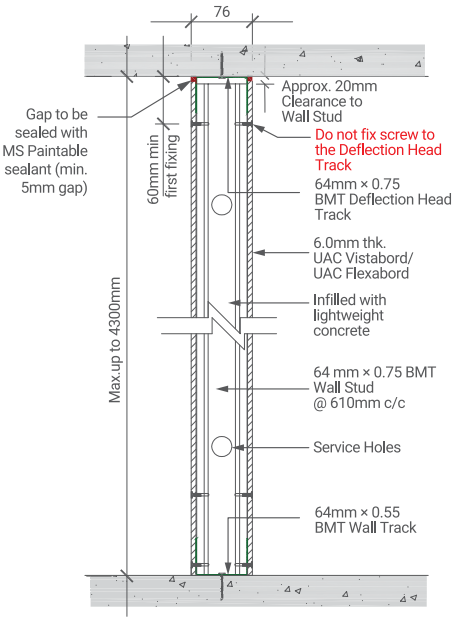
- Cleaner and safer construction site
- Fire rating up to 4 hours
- Strong anchorage
- Allows for fast-track construction
- Good thermal insulation
- Lightweight (Density of 800-1100kg/m$^3$, 3× lighter than brick walls)
- Impact-resistant
- Good sound insulation (Up to STC 55dB)
- IBS Factor 0.7
- Durable (Impervious to permanent water damage and high humidity, does not warp, crack, or split easily)

## CERTIFICATIONS

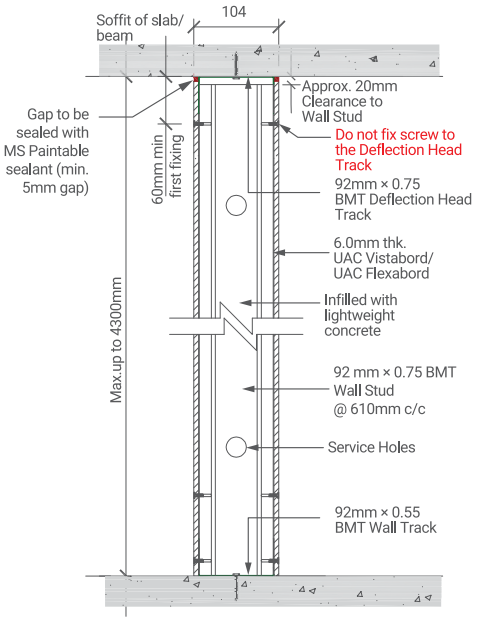
- Fire Rated 2 & 4 Hours Test Report - BS 476 : Part 22 : 1987
- Sound Insulation - ISO 10140-2 : 2010
- Thermal Insulation - ISO 8990 : 1994
- Performance Test - BS 5234 : Part 2 : 1992

| | Nominal Thickness (mm) | Reference Standard | Results |
|---|---|---|---|
| Fire Rating | 76, 104, 137, 168 | BS 476 : Part 22 | 2, 4 hours |
| Sound Insulation | 104<br>137 | ASTM E90 | STC 46dB<br>STC 55dB |
| Thermal Insulation | 104 | ISO 8990 | R value = 0.31m².K/W<br>(k value = 0.614 W/m.K) |
| Lightweight (Core Mix Density) | | | 900-1300 kg/m³ |

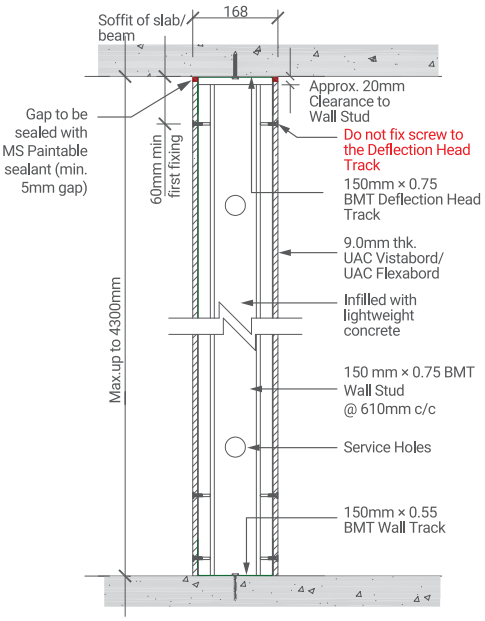
# 4 - UAC SOLIDWALL



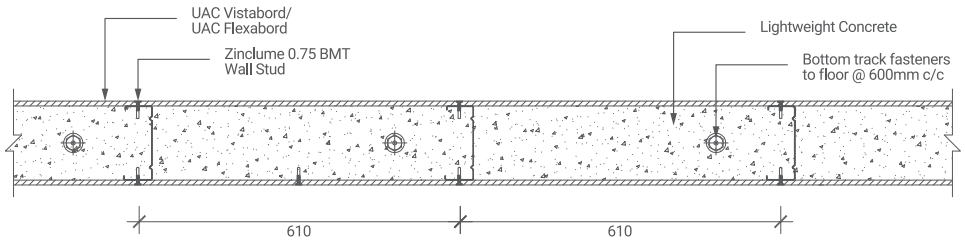

WALL TYPE 76mm



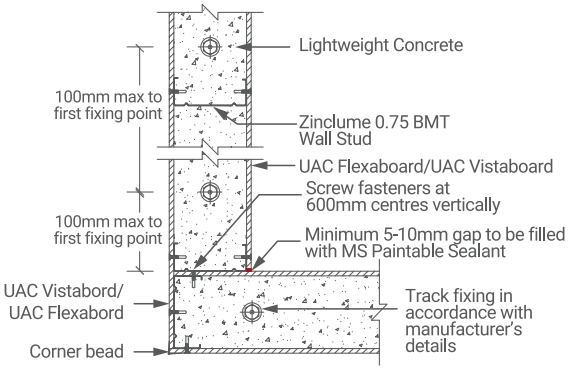

WALL TYPE 104mm



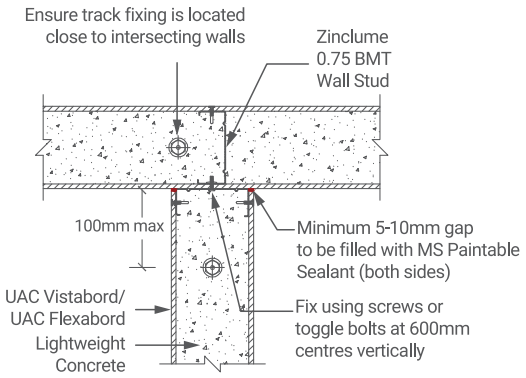

WALL TYPE 168mm



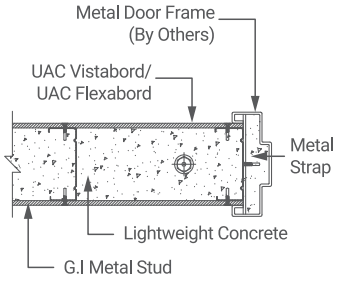

TYPICAL LAYOUT PLAN



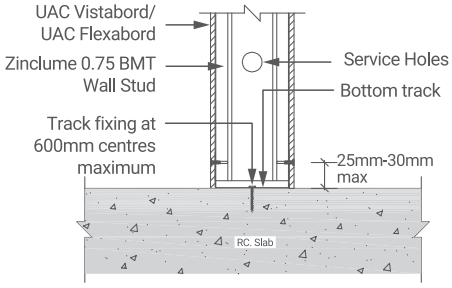

CORNER DETAIL



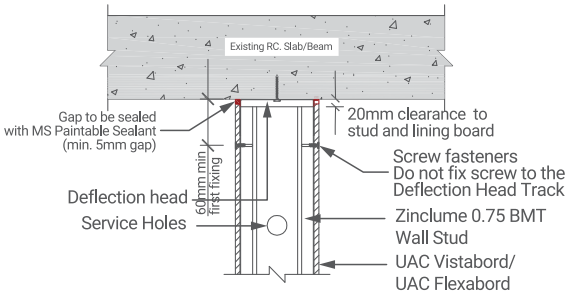

INTERSECTION DETAIL




TYPICAL DOOR FRAME DETAIL



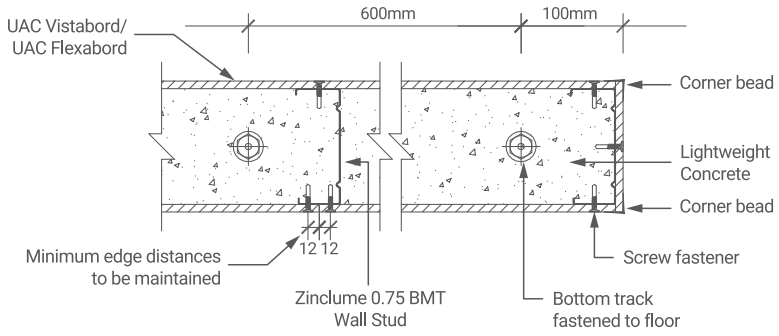

TRACK FIXING DETAILS



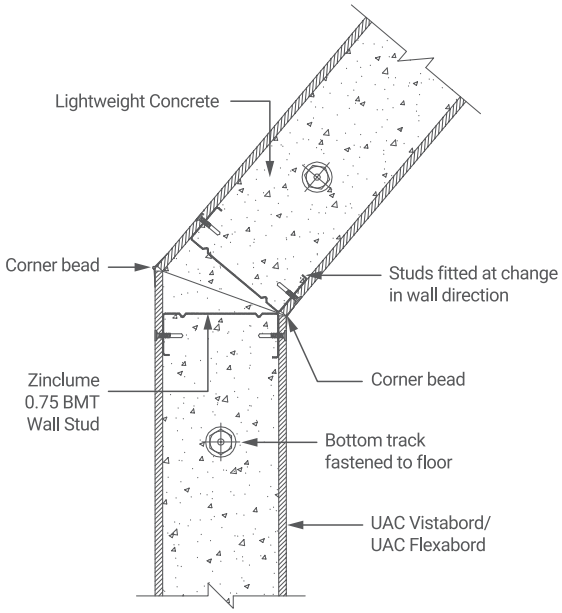

WALL TO CEILING JUNCTION DETAIL

Note :

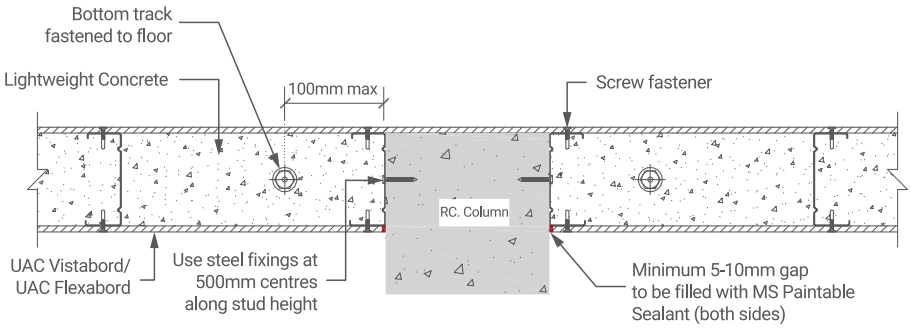
1. UAC SolidWall 76mm THK = 64mm × 0.75 BMT wall stud with 6.0mm UAC Vistabord/UAC Flexabord (both sides)
2. UAC SolidWall 104mm THK = 92mm × 0.75 BMT wall stud with 6.0mm UAC Vistabord/UAC Flexabord (both sides)
3. UAC SolidWall 168mm THK = 150mm × 0.75 BMT wall stud with 9.0mm UAC Vistabord/UAC Flexabord (both sides)



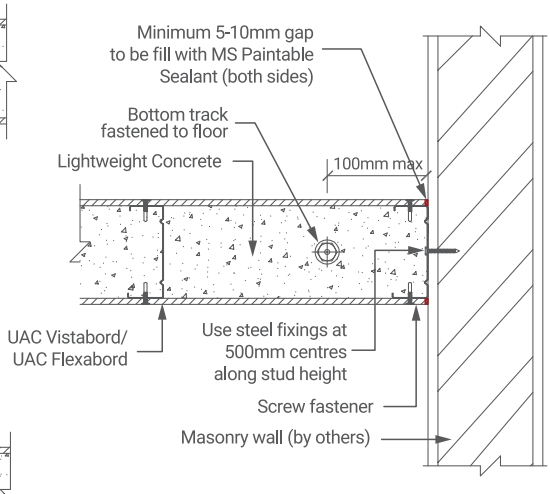

WALL END DETAIL



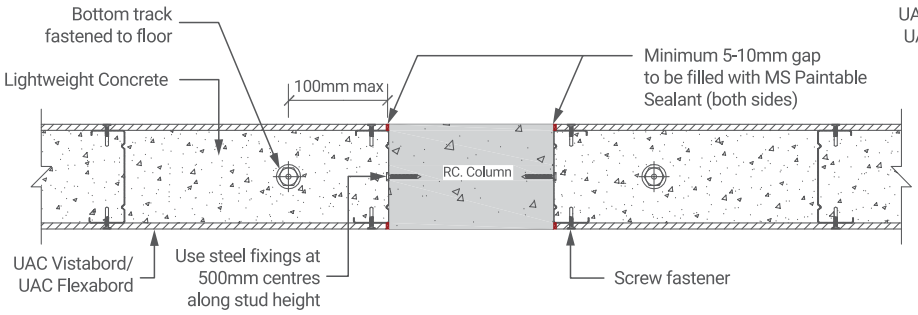

ANGLED WALL DETAIL



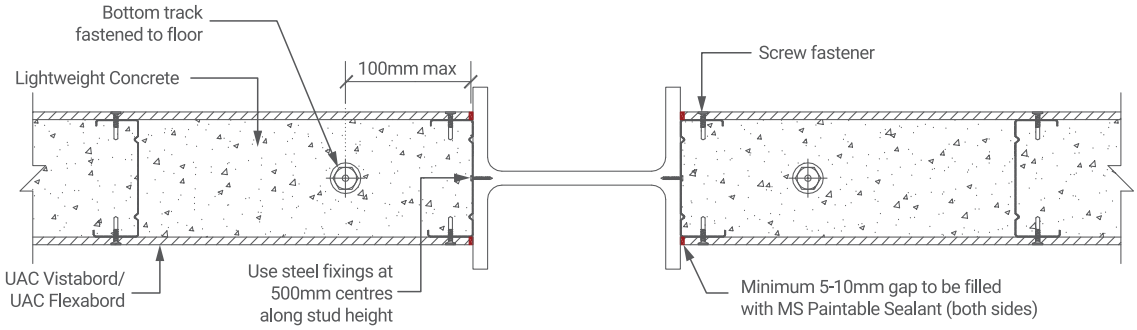

TERMINATION - RC COLUMN (OPTION 1)




INTERSECTION - MASONRY DETAIL



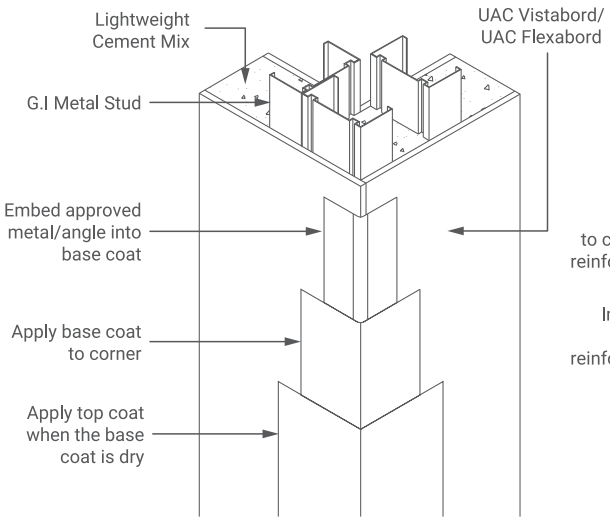

TERMINATION - RC COLUMN (OPTION 2)



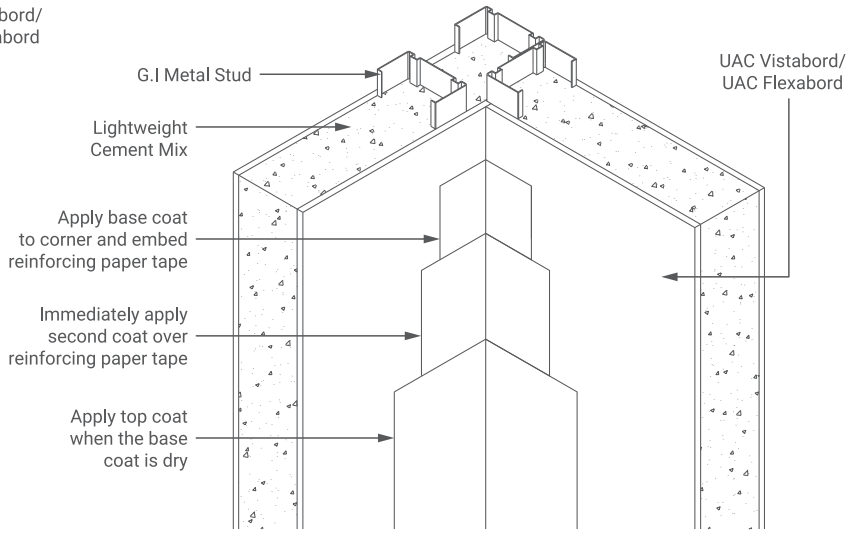

TERMINATION - I-BEAM (MILD STEEL)

Note :

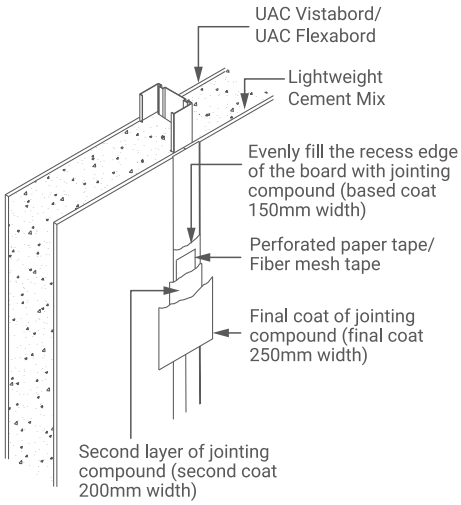
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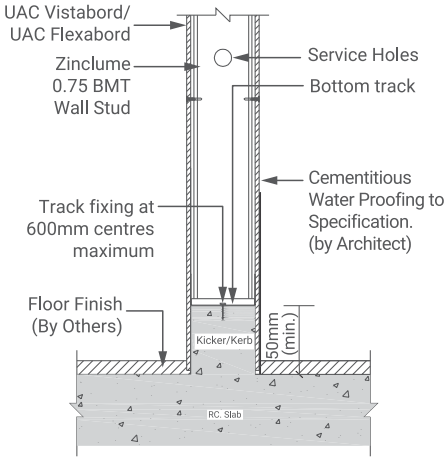

EXTERNAL CORNER DETAIL



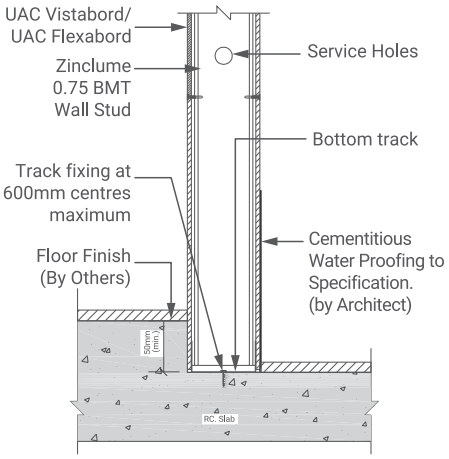

INTERNAL CORNER DETAIL




RECESS JOINT DETAIL




OPTION 1
TYPICAL KERB FIXING DETAILS



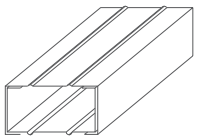

OPTION 2
TYPICAL KERB FIXING DETAILS

Note :

1. UAC SolidWall 76mm THK = 64mm × 0.75 BMT wall stud with 6.0mm UAC Vistabord/UAC Flexabord (both sides)
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3. UAC SolidWall 168mm THK = 150mm × 0.75 BMT wall stud with 9.0mm UAC Vistabord/UAC Flexabord (both sides)







DETAIL DOUBLE STUD

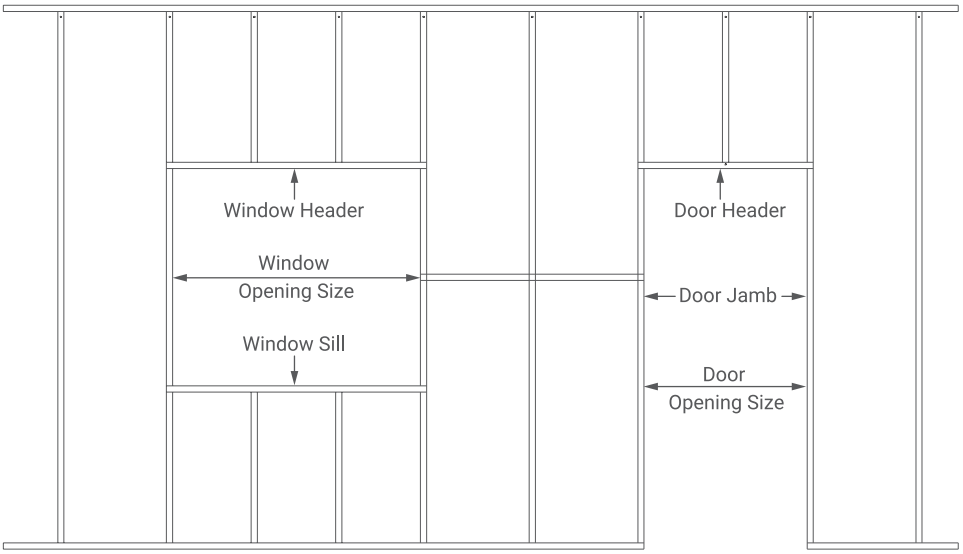
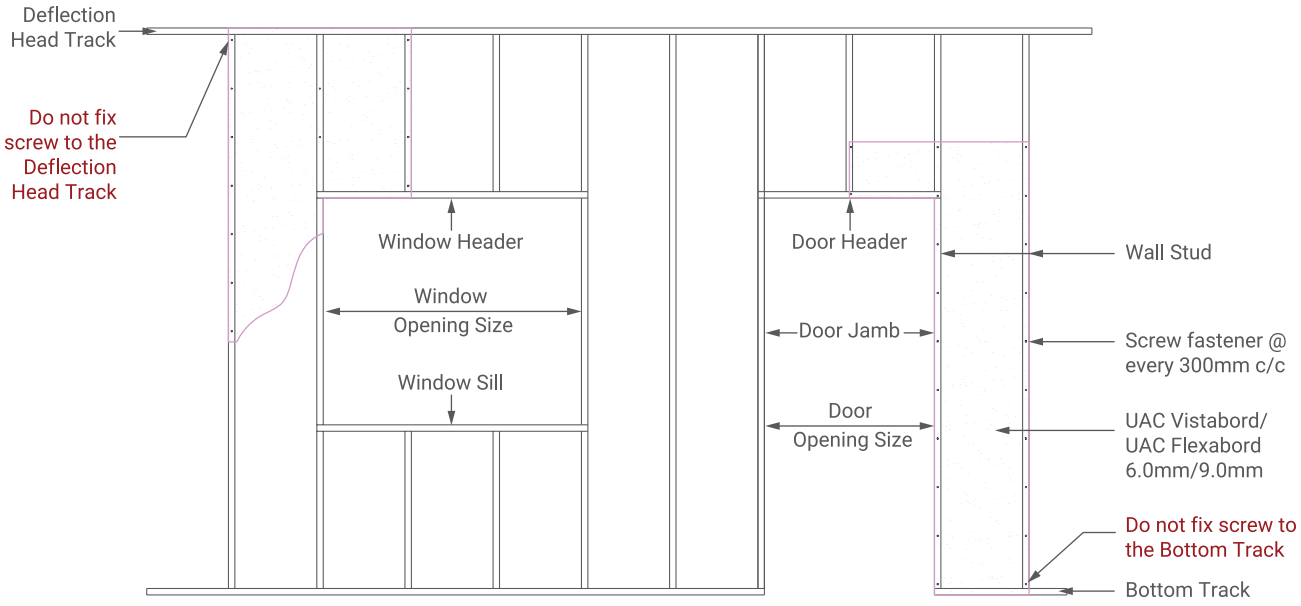



TABLE 1:

| OPENING TYPE | WINDOW JAMB | | WINDOW HEADER / SILL | | DOOR JAMB | | DOOR HEADER | |
|---|---|---|---|---|---|---|---|---|
| WALL HEIGHT (mm) | 5800 | 3800 | 5800 | 3800 | 5800 | 5800 | 5800 | 3800 |
| Opening Size < 1500mm | Double Stud | Single Stud | Single Track | Single Track | Double Stud | Single Stud | Single Track | Single Track |
| 1500mm < Opening Size < 2000mm | Double Stud | Single Stud | Single Track | Single Track | M.S. Hollow Section | Double Stud | M.S. Hollow Section | Single Track |
| 2000mm < Opening Size < 2500mm | M.S. Hollow Section | Double Stud | M.S. Hollow Section | Single Track | M.S. Hollow Section | M.S. Hollow Section | M.S. Hollow Section | M.S. Hollow Section |
| Opening Size > 2500mm | M.S. Hollow Section | Double Stud | M.S. Hollow Section | M.S. Hollow Section | M.S. Hollow Section | M.S. Hollow Section | M.S. Hollow Section | M.S. Hollow Section |

Note :
1. Refer to UAC Systems test conducted for performances.
2. Prop temporarily on opening header during lightweight cement mix infill stage and for at least 24 hours until the infill is partially cured.

## TYPICAL OPENING DETAILS - JAMB STUD



A Member of Boustead Group


**UAC BERHAD**
196301000271 (5149-H)

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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


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