





## **Application**

Non loadbearing partition system suitable for high performance solutions, residential, commercial, retail, hotel, education and leisure buildings. Offering the following advantages over traditional construction methods:

High bay walls up to 10 metres. Quick and easy dry build construction. Reduced wall thickness, increasing floor space Reduced construction weight Excellent performance for both fire resistance and sound insulation

U channels are fixed to floor and ceiling, studs are located inside the channels spanning floor to ceiling. Gypsum standard, fire, sound or specialist boards (to suit the performance requirements) are screw fixed to both sides of the studs and channels. Boards are sealed and finished to suit. Insulation can be located between the studs to enhance sound performance.

Water and electrical supplies can be easily located within the partition wall passing through the service cut outs in the studs.

Access panels can be located for easy access to services.

#### Installation:

Mark the position of the partition on both floor and ceiling. Apply sealant to underside of U tracks and mechanically fix at 600mm centres. Fit C studs at abutment walls also with sealant and mechanical fixing.

Cut I studs to height of partition, making allowance for any deflection requirement. Locate the studs into the U tracks at 600mm centres, reduced for high performance or heavy finishes / loads, and high bay walls, please confirm design solution with our sales office.

Screw fix boards to one side of the studs with drywall screws at maximum 300mm centres, reducing to 200mm centres at perimeter studs or channels. Where deflection is required at the partition head boards should not be directly screw fixed to the head track (see special fixing detail). Board should be staggered and fixing channel or plate should be located behind all horizontal joints.

Services and insulation can be installed inside the cavity, following which the partition should be closed by fixing boards in the same way as detailed above to the second side.

**Details** 







Junction at wall

Standard Head

Floor Fixing



# **Openings**







Metal stud frame

# Head Details



## Deflection head a





Deflection head c



Deflection head b

### **Deflection head detailing:**

Deep tracks for all walls over 4m and extra deep U tracks when over 6m. The depth of track should be calculated to account for any deflection from the sub structure at the head. When over + / - 30mm or 8m in height special size tracks should be used, contact ESPdrywall technical office.

### **Specification:**

When built in accordance BS 8212:1995 and BS 8000 part 8, being code of practice for drylining and partitioning.

#### Performance

BTC 13294FA In accordance with BS476: part 22:1987

I Studs RS 50 / 40 / 0.6mm 60 / 40 / 0.6, 0.7mm 70 / 40 / 0.7mm 92 /40 / 0.9mm 146 /40 / 0.9mm

### 1 hour fire rated.

Single layer 15mm Type F Gyproc board SE each side, Studs located between Head and base tracks at 600mm centres. Boards fixed with 32mm drywall screws to perimeter and intermediate studs at 300mm centre. Fixing strap at horizontal board joints and screw fixed at 300mm centre with 25mm drywall screws.

#### 2 hour fire rated.

Double layer 12.5mm Type F Gyproc board SE each side, Studs located between Head and base tracks at 600mm centres. Inner layer boards fixed with 25mm drywall screws to perimeter and intermediate studs at 300mm centre, outer layer boards fixed with 42mm drywall screws. Fixing strap at horizontal board joints and screw fixed at 300mm centre with 25mm drywall screws.

System performance based on test results by UKAC facility to BS 476 part 22 : 1987, BS EN iso717-1

Plasterboards as defined in BS EN 520: 2004, A1: 2009.

Wall heights in accordance BS EN 1993 for cold formed metal sections. L/240 @ 200pa. Contact ESPdrywall technical office for walls with exposure to wind loadings or dominant building openings.