

## TWI50-K-60(50) - SPEEDLINE METAL STUD PARTITION

**Type & Ref:** --  
Version V1(24/10/23) --

**SPEEDLINE Reference:** TWI50-K-60(50)<sup>(200)</sup>

### **Performance Overview:**

Fire Resistance (minutes): 120/120 (Integrity/Insulation) BS 476 Part 22: 1987  
 Sound Insulation: 65 R<sub>w</sub>dB (-3,-9) estimated on TWI50-K-59(50)(200)  
**Maximum Height:** Calculated on limiting deflection L/240 at 200Pa  
 @ 600 mm Ctrs: 2700 mm  
 @ 400 mm Ctrs: 3300 mm  
 @ 300 mm Ctrs: 3600 mm  
 Nominal Width: Min 200 mm. (Excluding finishes). Width can be increased to project requirements.  
 Insulation Required: 50 mm APR.  
 Duty Rating: Severe. BS 5234-2:1992 (Annexes A-F)  
 Deflection Required: To be confirmed by Structural Engineers. (Max 25mm on 50mm studs)

### **Steel Framing Detail:**

Head Tracks: All as per the current **SPEEDLINE** Drywall Manual.  
 Two parallel lines of **SPEEDLINE SPT52 'U' Track**, secured to soffit, in the centre of the profile at 600 mm centres with suitable fixings. (Utilise **SPEEDLINE Deep Flange 'U' Track** if deflection allowance is required).  
 Base Tracks: Two parallel lines of **SPEEDLINE SPT52 'U' Track**, secured to floor in the centre of the profile, with suitable fixings.  
 Studs: The two frames are installed using **SPEEDLINE PI50 'I' Studs** at 600 mm centres. Friction fitted into tracks. (400 mm centres if to be tiled). Abutment 'C' studs secured at max 600 mm centres, with suitable fixings.  
 Stud Bracing: No Stud bracing is required.  
 Deflection Head: If structural deflection is deemed necessary, please refer to **SPEEDLINE** Drywall Manual and/or project detail.

### **Plasterboard linings:**

Inner Layer: 15 mm Knauf Soundshield Plus attached to both sides of framing at 600 mm maximum centres with **25 mm SPEEDLINE Drywall Screws**.  
 Outer Layer: 15 mm Knauf Soundshield Plus attached to both sides of framing at 300 mm maximum centres with **42 mm SPEEDLINE Drywall Screws**.  
 Humid Areas: Replace with 15 mm Knauf Performance Plus attached to framing at 300 mm maximum centres with **42 mm SPEEDLINE Drywall Screws**.  
 Boarding Installation: All plasterboard joints to be staggered on opposing partition faces.  
 Horizontal Board Joints: **SPEEDLINE PB24** Partition Brace or **FS24** Flat Bracing Strip required behind all horizontal board joints.

### **Finishes:**

Acoustic Seal: Skim plaster or taped & jointed (MR Boards to be taped & jointed only).  
 At junctions between partitions and any other air paths, apply a continuous bead of **SPEEDLINE Intumescent Sealant**, to clean dust free surfaces. Please Note: **SPEEDLINE Intumescent Sealant** is NOT compatible with Lubrizol cPVC pipes.

### **Accessories:**

**Service Support Plate AH174** & 18 mm Plywood for all pattresses.  
 Electrical socket openings should be considered as part of the fire stopping package and consideration should be given to meet the performances of the Partition/Lining system regarding fire and acoustic performance.

**General Notes:**

To be installed in accordance with SPEEDLINE recommendations and relevant British standards including BS 8000-0:2014 and BS 8000-8:2023.

This document should be read in conjunction with clauses specified in original contract documentation. Flanking details to be appropriate to current requirements.