

## **Polar Vision**

Sound Reduction to BS EN ISO 140-3: 1995

#### **Summary of Performance**

Document No. PO / S7

# Polar Double Glazed Partitioning System with Two Part Dry Joint (No Mullion)

This is to confirm that the double glazed construction of the above partitioning system using 12.4mm Komfort intumescent fire safety glass and 10mm thick toughened safety glass as detailed in Komfort data sheet PO SOU/INST.S7 and summarised overleaf has been assessed in conjunction with evidence contained in the Building Test Centre Report No. BTC 14745DA, BTC 16191AA, BTC 16191BA, (available on request) for measurement of airborne sound insulation of building elements in acordance with BS EN ISO 140-and that the resulting Rw measurements are derived from BS EN ISO 717/1.

Weighted Sound Reduction Index 100 - 3150 Hz

**45** dB(Rw)

For performance validation of the installed product this Summary of Performance must be accompanied by the signed Contractors Statement



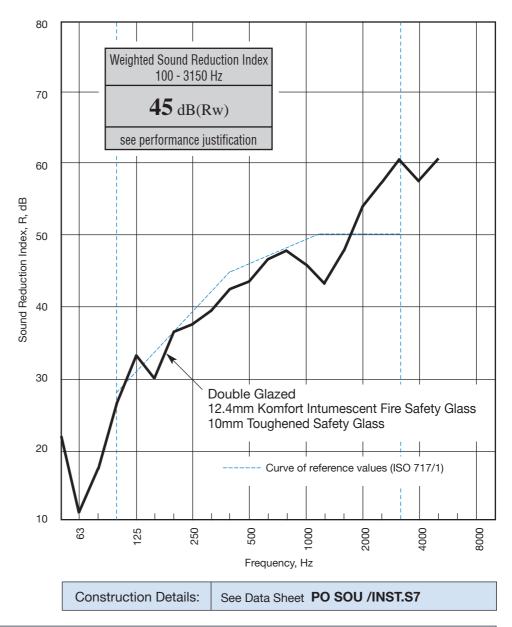
#### **Summary of Results**

### Polar Vision Double Glazed Partitioning System

## using 12.4mm Komfort Intumescent Fire Safety Glass and 10mm Toughened Safety Glass with Two Part Dry Joint

Test Report:
BTC 14745DA
Test Date:
22 August 2006

Freq. Hz	R dB
50	22.1
63	11.2
80	17.7
100	26.8
125	33.4
160	30.0
200	36.8
250	37.3
315	38.7
400	42.6
500	43.4
630	46.8
800	47.9
1000	45.9
1250	43.1
1600	47.9
2000	54.0
2500	57.4
3125	60.5
4000	57.6
5000	60.5
6300	
8000	
10000	



Performance Justification:

Tests carried out under BTC 16191AA and BTC 16191BA using the same glass combinations with either ghost post (DGP2) or bubble dry joint (SJ34) clearly demonstrate that use of the bubble joint results in a 1dB performance reduction. Therefore the same performance reduction has been applied for other dry joint constructions were identical glass combinations have been tested with a ghost post. For 12.4mm thick Komfort intumescent fire safety glass and 10mm thick toughened safety glass test with ghost post see Building Test Centre Report No BTC 14745DA as detailed above and in Komfort Summary of Performance **PO / S6**.

The above data must be read in conjunction with the test summary description given overleaf and on the associated data sheet. The information given is an extract of the test report supplied by The Building Test Centre, East Leake, Loughborough.

BTC is a UKAS approved test laboratory.



Polar Vision Double Glazed Partitioning System Acoustic Test Performance Assembly using 12.4mm Komfort Intumescent Fire Glass & 10mm Toughened Glass with Two Part Dry Joints

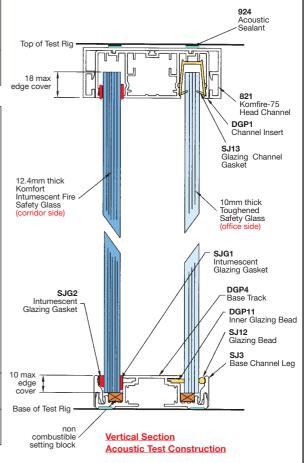


#### **Double Glazed**

Corridor side: 12.4mm thick Komfort Intumescent Fire Safety Glass
Office side: 10mm thick Toughened Safety Glass

Maximum Construction Height: 3000mm

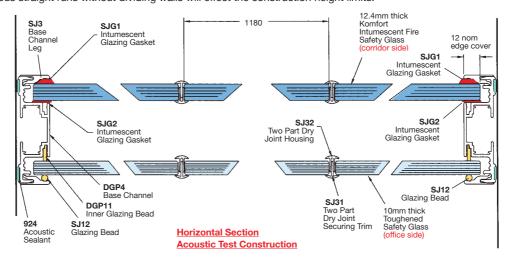
Polar Head: The Komfire-75 head channel (821) was Double Glazed fitted internally with the inner double glazed Construction: head channel (DGP1) containing the glazing channel gasket (SJ13) insert to hold glass in position on the 10mm side with intumescent glazing gaskets (SJG1 & SJG2) used on the 12.4mm fire glass (corridor) side only. Base: Two part base channel (DGP4 and SJ3) with 12.4mm thick glass held in place using intumescent glazing gaskets (SJG1 & SJG2) and neutral colour PVCu glazing beads (DGP11 & SJ12) on the 10mm thick glass side. **Abutments:** Two part base channel (DGP4 and SJ3) with 12.4mm thick glass held in place using intumescent glazing gaskets (SJG1 & SJG2) and neutral colour PVC<sup>u</sup> glazing beads (DGP11 & SJ12) on the 10mm thick glass side. Vertical Joint: Two Part Dry Joint (SJ31 / SJ32). Glass: 12.4mm thick Komfort Intumescent Fire Glass & 10mm thick Toughened (class ëAi) Safety Glass. Glass Area: Total of 3 No. panes of each glass 1180mm wide x 2372mm high (8.29m<sup>2</sup>) were installed.



#### Notes:

Acoustic sealant is used in place of foam seal on the test construction due to the irregular surface in the test rig aperture.

The construction height given is guidance for internal office construction subject to design layout requirement. Long continuous straight runs without dividing walls will effect the construction height limits.



Data Sheet No. PO SOU/INST.S7 - 04/10

