**Details of noise reduction from external sources**

**61-63 Holmes Road**
**London**
**NW5 3AN**

*Condition 16*
*The development hereby permitted shall not be occupied until a scheme for protecting the proposed dwellings from noise from external sources has been submitted to, and approved in writing by, the local planning authority. The scheme shall include sound insulation and attenuated ventilation to ensure that noise from external sources shall not exceed the following levels:*

| | | |
|---|---|---|
| *Living rooms* | *35dB LAeq 16hrs* | *07.00 to 23.00 hours* |
| *Bedrooms* | *30dB LAeq 8hrs* | *23.00 to 07.00 hours* |

*The approved scheme shall be implemented before each dwelling is occupied and shall thereafter be retained.*

Following the recommendations from the Environmental Noise Report and having consulted with a Mechanical and Electrical consultant, the following are proposed:

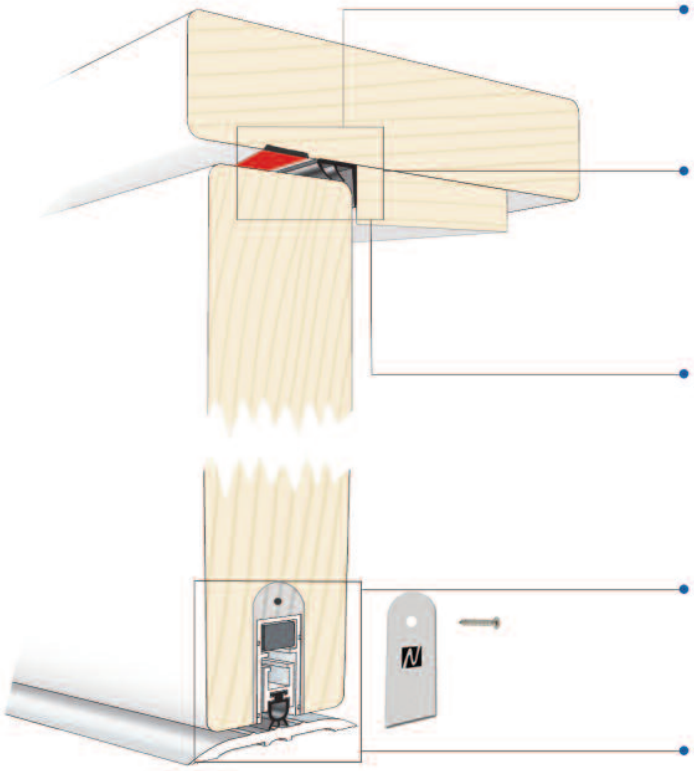
The acoustic report has recommendations for specific components to meet the required attenuation, with the exception of the door seals for the living room doors leading onto the balconies. A door seal has been sought, to be installed on these doors which achieves the required attenuation (54mm Halspan Prima/Optima), please see the attached data sheet.

The MVHR system will be ducted to outside using a flat duct. It is proposed that silencers will be installed on the intake and exhaust ducts from outside. This will reduce the level of external ambient noise which will be perceived within the dwelling (Nuaire PVCSIL-1000 which absorbs sound in the upper frequencies by 40 dB or more), please see the attached data sheet.

# 54mm Halspan Prima/Optima

Door configuration: single leaf, single action

**36dB** Rw (glazed)
**34dB** Rw (unglazed)



Note - Threshold optional, recommended

Intumescent* see note

Available in:
White
Brown
Black
Cream
Grey
Red

Triple Fin

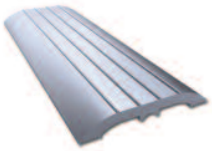
Triple Fin

Available in:
White
Brown
Black

Threshold Drop Seal

End plate supplied

Threshold



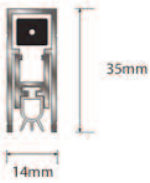
**Halspan acoustic seals**

- Suitable for latched or unlatched doorsets
- Tested in accordance with BS EN ISO 140-3: 1995
- Cold smoke BS 476 PT 31:1
- UKAS approved product text
- Halspan seals have been proven not to compromise fire test performance under British Standard fire resistance testing

Triple Fin


Threshold


Threshold Drop Seal




| Jambs | Head | Threshold | Meeting Stiles | Unglazed | Glazed |
|---|---|---|---|---|---|
| Triple Fin SLS TR 100 | Triple Fin SLS TR 100 | Threshold Drop Seal SLS DRP Range | - | 34dB Rw STC | 36dB Rw STC |

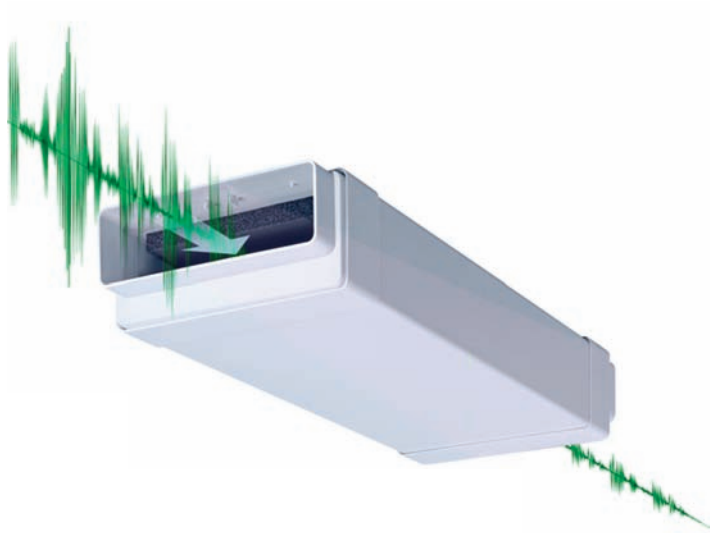
| Glazing Options | |
|---|---|
| 15mm Pyrostop | 36dB Rw STC |

* For full intumescent details please refer to the latest Halspan technical manual.
Accepts all current Halspan intumescent details allowing maximum fire envelope.
Recommended gap tolerances between leaf and frame between 3mm - 4mm.

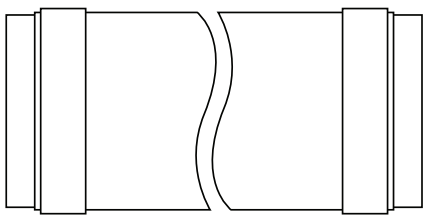
NOISE SOLUTIONS

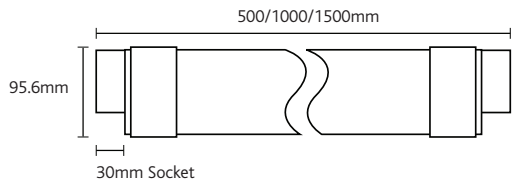
## INLINE ATTENUATION

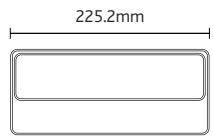
### AVAILABLE IN 0.5M, 1M & 1.5M LENGTHS



- **Regulation driven** to reduce duct noise for designers "Domestic Compliance Guide 2010" & noise requirements Part F 2010
- **Corrosion Proof** - Lightweight PVC removes the risk of corrosion
- **Reduce cross talk** room to room noise
- **Prevents noise ingress** for inner city development
- **Space Saving** - Slim line low profile design for integration within your ducting system






## SOUND ABSORPTION CHART

| Silencer Code | 125 Hz | 250 Hz | 500 Hz | 1k Hz | 2k Hz | 4k Hz | 8k Hz |
|---|---|---|---|---|---|---|---|
| PVCSIL-500 | 10.8 | 5.6 | 6.2 | 7.5 | 18.9 | 34.3 | 31.7 |
| PVCSIL-1000 | 10.1 | 6.6 | 8.3 | 11.6 | 40 | 49.8 | 51.4 |
| PVCSIL-1500 | 9.9 | 8.2 | 11.4 | 16.1 | 44 | 53.5 | 53 |

Tested by SRL Test Report No. C/08/51/20594/R02

All sizes are internal dimensions.