

# Acoustic louvres

- 150 deep
- 300 deep
- Steel
- Aluminium



## Introduction

The Naco range of acoustic louvres has been developed by Ruskin (USA), our associate company.

Sound data is produced from tests carried out in the Ruskin Sound Laboratory based on ASTM E90-90 and classified in accordance with ASTM E413-87.

## Types

150 mm deep with 75 mm blade pitch

300 mm deep with 150 mm blade pitch

## Coefficient of discharge

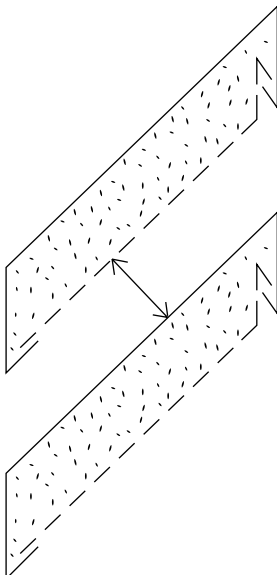
NAL150 0.210  
NAL300 0.240

Cd and Ce figures can, for all practical purposes, be taken as the same.

## Free area (based on 1m<sup>2</sup> area)

NAL150 30%  
NAL300 28%

Free area is the minimum measured area of each opening through which air can pass.



## Materials

Zinc plated steel sheet formed to required profile

Frame 18g  
Blades 22g  
Perforated sheet 16g

Mill finish aluminium is available for frame and blades.

## Bird wire guard

18g expanded aluminium, fitted as standard.

## Acoustic material

Rockwool RW3 with non-woven mineral black tissue finish. RW3 is highly water resistant, non-combustible and vermin proof.

## Finishes

Steel louvres are available for site painting (not by Naco) or polyester powder coated to the RAL colour range.

Aluminium louvres are available in mill finish, polyester powder coated to the RAL colour range or, natural anodised.

Note, the perforated sheet is pre-galvanised in all cases.

Bird wire guard is mill finish as standard

## Construction

Steel louvres are fabricated, assembled, painted (if required) with the acoustic material fitted last.

Aluminium louvres are fabricated, finished (polyester powder coated / anodised), assembled, with the acoustic material fitted last.

## Sizes

### NAL150

Maximum panel area: 2.25m<sup>2</sup>  
Maximum width: 1500 mm

### NAL300

Maximum panel area: 1.7m<sup>2</sup>  
Maximum width: 1500 mm

## Doors

Doors are available with dummy blades for NAL150 and 300 louvres.

An insulated blanking plate is fitted as standard.

## Transmission Loss (Sound Reduction Index)

Type	Hz	125	250	500	1 K	2 K	4 K	8 K
NAL150		7	5	8	14	15	16	17
NAL300		9	8	12	16	15	15	17

## Free Field Noise Reduction db

Type	Hz	125	250	500	1 K	2 K	4 K	8 K
NAL150		13	11	14	20	21	22	23
NAL300		15	14	18	22	21	21	23

Transmission loss is the ratio in decibels of the acoustic energy transmitted through the louvre, to that incident upon it, stated as a function of frequency.

Free field noise reduction is the difference in decibels between the sound pressure level on the noise side and that measured on the opposite side at 1500 mm from the louvre.

## Pressure Loss Pa

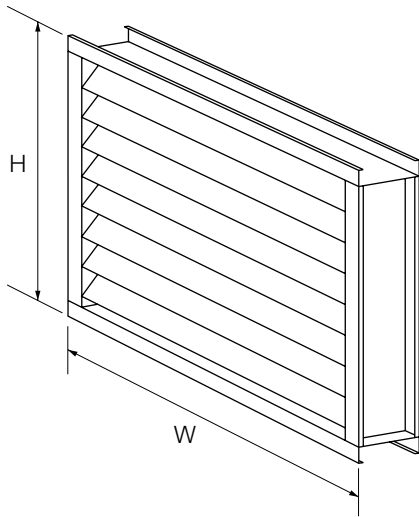
Face velocity m/s	0.5	1.0	1.5	2.0	2.5	3.0
NAL150	4	14	31	54	85	123
NAL300	3	11	24	42	65	94

## Panel Weight (Kg / m<sup>2</sup>)

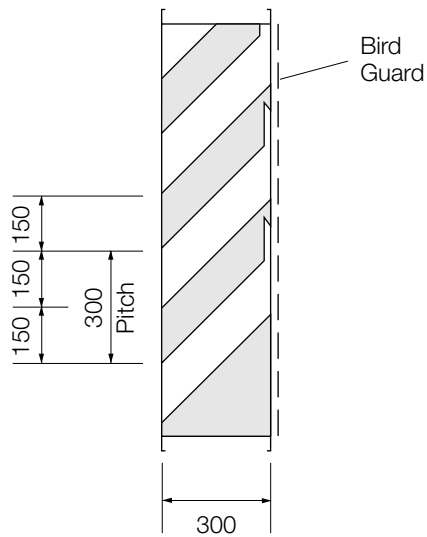
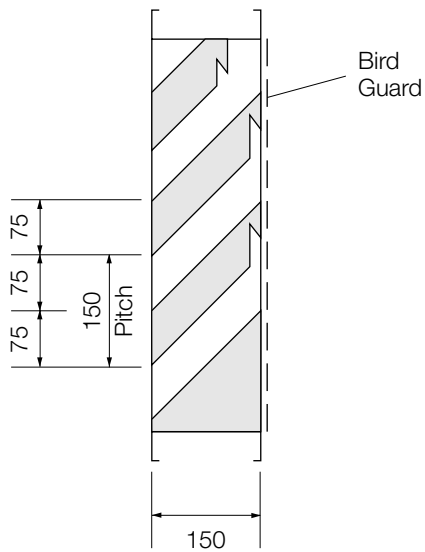
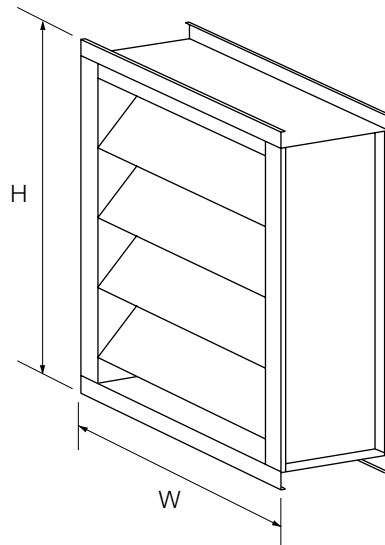
Type	150	300
Steel	30	41
Aluminium	22	30

Panels will be supplied as components for coupling where the width / height combination exceeds the recommended maximum panel area.

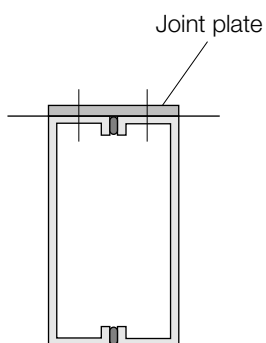
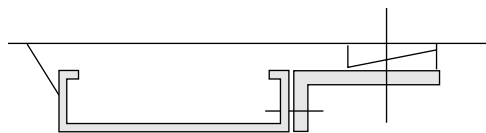
**NAL 150**



**NAL 300**



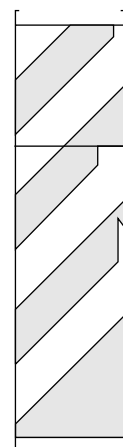
**Typical fixing**



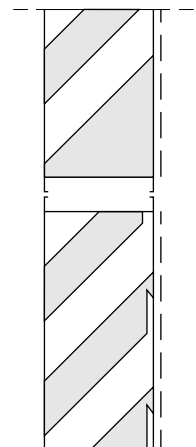
**Vertical coupling**

**Horizontal Couplings**

**Architectural**



**Internal / industrial**



Louvres exceeding the maximum panel height will be supplied in composite units providing a continuous line arrangement.

Louvres will be supplied in standard frames for stack coupling.

Ruskin Air Management Limited  
a BS EN ISO 9000 registered company

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Due to a policy of continuous product development the specification and details contained herein are subject to alteration without prior notice.

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