



# AFRICA AIRCONDITIONING & INSULATION SYSTEMS

YOUR ONE STOP HVAC SUPPLIER

## TECHNICAL CATALOGUE

Linear Grille  
Plastic



# LINEAR DIFFUSER

## FEATURES

- Two 25mm slots provide high flow rates with low noise levels.
- One piece construction of the diffuser eliminates unsightly joins.
- Attractive molded diffuser is scratch resistant and will not corrode or deteriorate with age.
- Fast, easy installation.
- Two deflectors per slot enables 180 degree throw pattern.
- Significantly lower cost than aluminum diffusers.
- Will fit both metric and imperial commercial ceiling grids.

## CONSTRUCTION

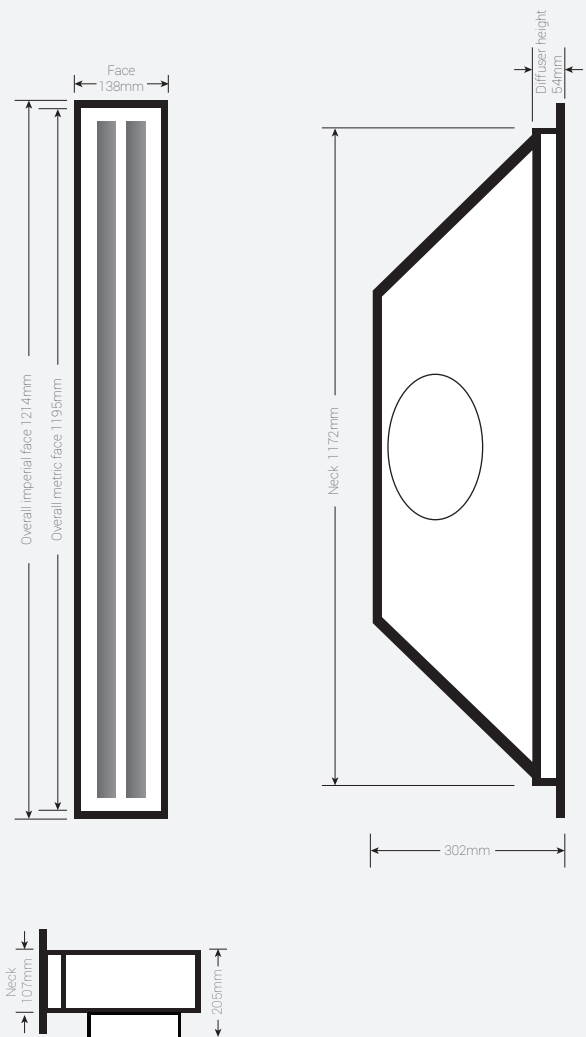
- The diffuser is constructed from white ABS plastic.
- The boot, adaptor and deflectors are all constructed from black plastic.
- The internal insulation for the boot is molded polystyrene.
- The boot is supplied with a side central hole for the propriety spigot.

## APPLICATIONS

- Reverse cycle commercial air conditioning.
- Heating.
- Suggested cut out 118mm x 1175mm.

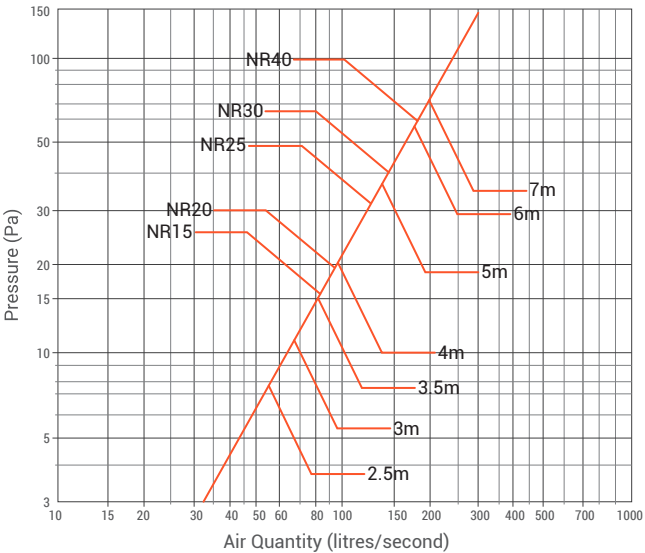


## DIMENSIONS

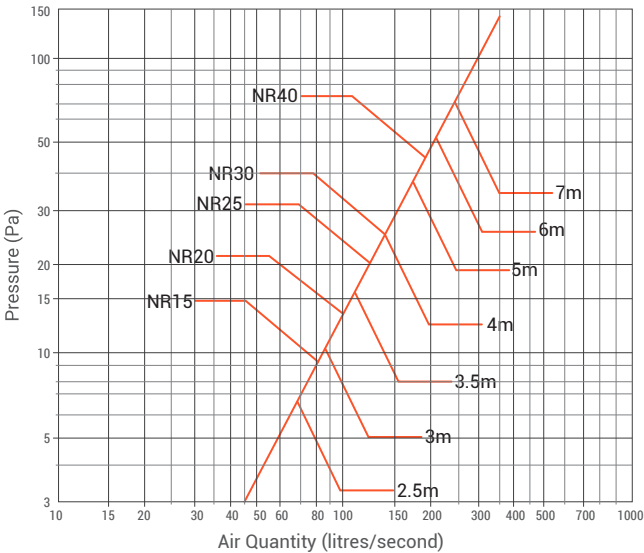


PERFORMANCE CHARACTERISTICS

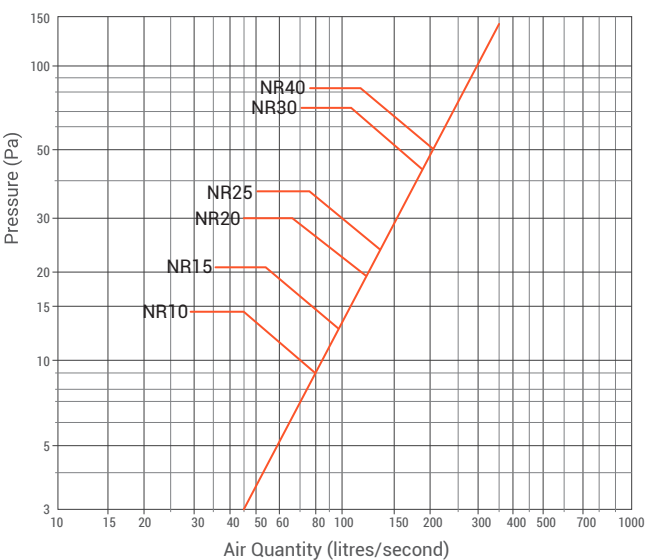
LINEAR  
(1200x100 Linear Elite Diffuser - Horizontal discharge)



LINEAR  
(1200x100 Linear Elite Diffuser - Vertical discharge)



LINEAR  
(1200x100 Linear Elite Diffuser - Return Air)



## ACCESSIBLE CEILING INSTALLATION

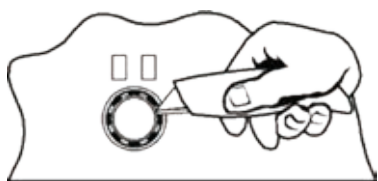
- 1** Check the proposed location for the linear in the ceiling void. You should ensure the installation of the linear does not require the cutting of any structural timbers. If ceiling joists are required to be cut they should be braced with additional supports prior to cutting. You will require a minimum height of 300mm in the ceiling void to facilitate the installation of the boot.

- 2** Mark out the hole on the ceiling as follows:  
118mm wide x 1175mm long

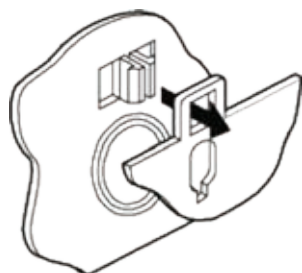
- 3** It is important to cut out hole in ceiling very accurately.



- 4** Cut out the boot holes to receive the clips. The number of holes you cut out depends on how many clips you want to install.



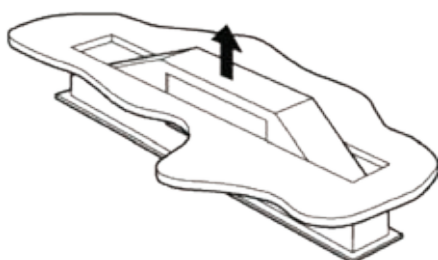
- 5** Clip the boot onto the linear. Ensure that all the boot / linear clips are securely engaged.



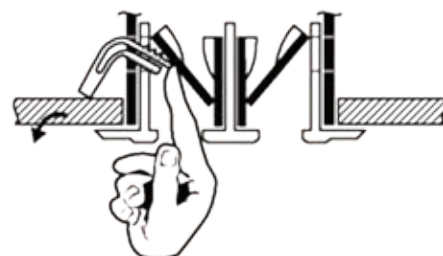
- 6** Using a small screw driver, in the notch on the ends of each deflector blade, close the outermost deflectors to reveal the clip holes.



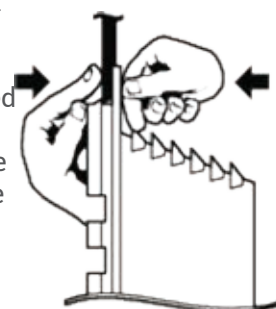
- 7** Pass the assembled boot / linear up through the hole in the ceiling



- 8** Insert the plastic clips into the clip holes in the linear. Ensure the clips are pushed through as far as possible. Adjust the deflector blades down to ensure the blades and clips do not interfere. Adjust the position of the clips and/or deflector blades as necessary.



- 9** Take the connecting spigot up into the ceiling and clip the spigot into the boot. Ensure the spigot is secured on all sides and corners by placing one hand inside the boot and applying pressure to the outside flange of the spigot.

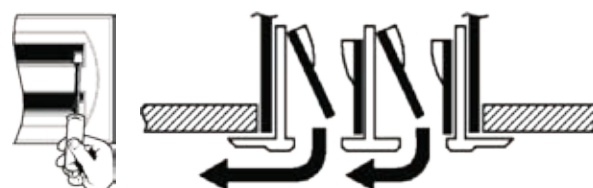


- 10** Fit the flexible duct over the spigot and tape into position.

- 11** Adjust the air quantities to the linear via an up stream balancing device.



- 12** Using a screw driver adjust the position of the deflector blades to provide the required throw pattern.(see overleaf for blade positions)



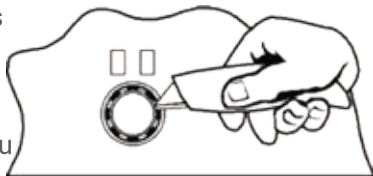
- 13** To clean diffuser use warm soapy water.

- 14** Please recycle all packaging.

## INSTALLATION FOR INACCESSIBLE CEILINGS

**1** Ensure the boots and diffusers are ordered separately.

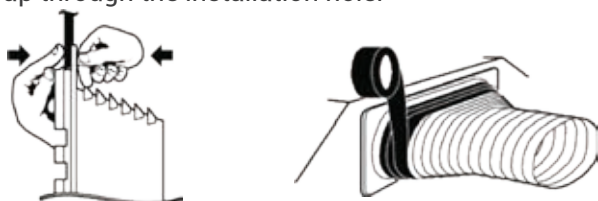
**2** Cut out the boot holes to receive the clips. The number of holes you cut out depends on how many clips you want to install.



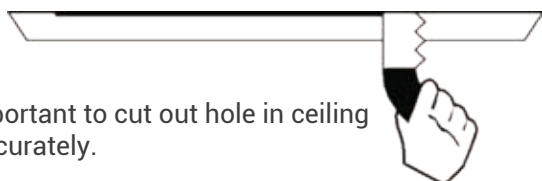
**3** Using side cutters trim off the clips on the inside of the boot (long sides only).



**4** Assemble the boot, spigot, flexible duct and hang assembly above the final location for the diffuser. Ensure you will be able to reach and cut the hanging strap through the installation hole.

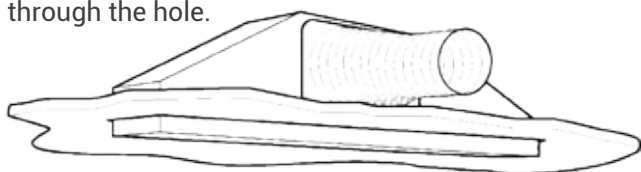


**5** After the ceiling has been installed mark out the hole on the ceiling as follows: L2S12 118mm x 1175mm

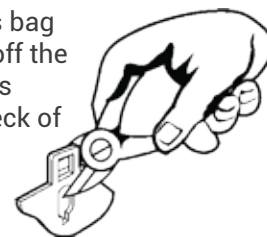


It is important to cut out hole in ceiling very accurately.

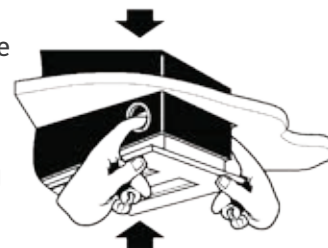
**6** Reach up into the ceiling and release the boot from the hanging strap. Carefully pull the boot down through the hole.



**7** Remove the diffuser from its bag and using side cutters trim off the clip receivers. (small squares which protrude above the neck of the diffuser.)



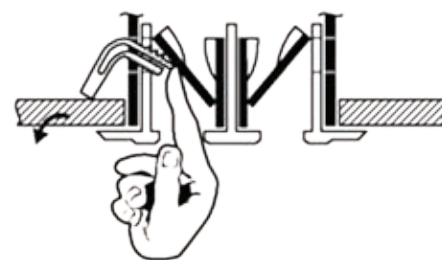
**8** Insert the diffuser into the boot ensuring the clips on the two ends of the diffuser are securely engaged. This can be achieved by pulling the boot down with your fingers while applying an upward force with your thumbs or hitting the diffuser up with your hand.



**9** Using a small screw driver, in the notch on the ends of each deflector blade, close the outermost deflectors to reveal the clip holes.



**10** Insert the plastic clips into the clip holes in the linear. Ensure the clips are pushed through as far as possible. Adjust the deflector blades down to ensure the blades and clips do not interfere. Adjust the position of the clips and/or deflector blades as necessary.



**11** Using a screw driver adjust the position of the deflector blades to provide the required throw pattern. (see overleaf for blade positions)



**12** To clean diffuser use warm soapy water.

**13** Please recycle all packaging.

## STOCKIST OF :

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- » Fibreglass Insulation
- » Closed Cell Insulation
- » Copper Insulation



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