

# Fixing and Handling Guide









# Section 1 Delivery/Storing On Site/Handling



- SpeedDeck is factory or on-site manufactured.
- Straight SpeedDeck bundles are a maximum 1 tonne, sheets nestled and banded with polypropylene or steel bands.
- Curved SpeedDeck is bundled in the same way, on returnable trestles and the correct way up for hoisting direct to the roof.
- Packs may be separated by wood fibre dunnage load separators.
- Packing sheets are marked as packing sheets.
- Some paint finishes have protective strippable film.
- If storing sheets for any length of time, keep clear of the ground and stack sheets to slight fall to shed rainwater.
- Cover with waterproof sheeting and support at maximum 2m intervals. If water has accumulated on the sheets, ensure it is removed before hoisting.
- Note: Stucco aluminium will discolour (oxidise) if exposed to strong alkalis i.e. cement, mortar, lime etc, or if left exposed in the pack for long.
- Load roof over main supports.
- Ensure frame will carry any point loading applied.
- Roof sheet bundles are 1 tonne max. WalkLiner packs are 1.5 tonnes max.
- Ensure that all the under ribs are facing in the direction of lay. This will prevent unnecessary handling and turning around on the roof.
- The direction of lay should always be into the prevailing wind where possible.









Note: Capillary/Fixing groove in top of rib





- Packs under 7.5m can be lifted with care using a site fork lift.
- Packs 7.5m to 13.6m can be lifted using 2 No. web slings with the sling angle > 45°, subject to the crane company's advice.



- Lifting beams are to be used for bundles over 13.6m long.
- Beams are to be hired separately and not included within the quotation.







# Section 2 Installation

- 1. Establish a straight line at the verge, 90 degrees to the eaves line
- 2. Install the first line of starter clips to this line. Always use the 2 No. shallow hex SDS20 screws provided per bracket (4 No. SDW40 screws if fixing to timber). Use SDS20 sockets for shallow hex head SDS20 and SDW40 screws.
- 3. Install the eaves filler strip.







#### 5. Install the next clips, using the gauging template to achieve 510mm gauging. Click the trailing rib to its clip.



- 8. Walk the trailing ribs together, walking along the rib.
- 9. Ensure that the over rib sits tight on the under rib.
- 10. At the end of a run, secure the last rib using a half clip (a standard clip cut in half, 2 No. screws per half clip).







- 11. Secure the exposed leading edge over night with a clip fixed over the rib.
- 12. When working on a detail (eg ridge), work off secure boarding. Protect roof access positions.
- 13. Only install as much insulation as can be covered in one SpeedDeck installation session, keeping the insulation dry. Insulation must fill the cavity.
- 14. Walk on ribs if possible to minimise risk of damage to pans.
- 15. At ridges, turn up pan of sheet to vertical.
- 16. Note: Isolate aluminium flashings from galvanised steel spacer. Ensure that insulation fills cavity under slight compression.
- 17. Check installation: Stoop down and look across the ribs of the roof sheet. Any ribs not fully locked together will be apparent.





### Ridge (Turn-up)

Trim back outside of outer rib to 45 degrees. This allows it to be located over another turned-up profile. Flatten the indents of the ribs. This can be done with a hammer, using the turnup tool as a dolly.



Only by using this procedure can the pans be turned up to around 90 degrees without tearing metal. Slide turn-up tool fully into each pan and bend upwards to around 90 degrees. Unless the tool is pushed fully on to the pans the turn-up will not reach the rib height.



IMPORTANT:

Sheet overhang at ridge should be between 125mm and 300mm, measured from centre of last clip to turned-up end of sheet.





### Eaves (Turn-Down)

For all roof pitches, the pans are turned down at the eaves. This stiffens the pan and improves water run-off on very low pitch roofs, preventing any run back of drips under the profile from the end of the sheet. Turn eaves down by 20 degrees using the turn-down end of the tool. Install angle strip under eaves if specified, secured with 2 No. aluminium or stainless steel rivets per pan, as specified.



#### **IMPORTANT:**

Sheet overhang at eaves should be between 125mm and 300mm, measured from centre of last clip to end of sheet.





### Top Fixing / Fixed Point

To maintain their correct position and prevent creeping as a result of thermal movement, all sheets must be fixed to the structure at the ridge position. The recommended methods for top fixing are illustrated below. For roof pitchings below 5 degrees pierce fix at the ridge purlin through the inner rib into the secret-fix clip, concealed by over-lapping ribs.

Pan stainless steel fixing for roof pitches above 5 degrees (concealed by ridge flashing)



To avoid possible damage to the roofing sheets, operatives should walk on the ribs of the decking, not on the flat pans. Areas of regular foot traffic, landing points at the top of the ladder etc., should be protected with walk boards.





### Verge

At verge install verge zed, fixed to IsoBar spacer. Fix verge flashing to zed only, not sheet, at max 450mm centres using stainless steel screws plus bonded washer or aluminium rivet, as appropriate.

#### **Profiled Fillers**

1.02m long ventilated foam fillers are provided for use at the ridge and eaves as required, as well as made to order raking cut fillers for hips and valleys.







## Section 3 SpeedDeck Checklist

#### Checklist for liner/ spacer /insulation.

Steel WalkLiner fixed using 5.5mm diameter screws plus minimum 15mm diameter bonded washer at 4 No. per sheet width at intermediate supports. 8 No. screws per sheet at end laps, hips or valleys (WalkLiner is non-fragile Class B to ACR [M]001:2000)

2 No. Screws plus 15mm diameter banded washer per IsoBar bracket

IsoBar brackets at 1020/765mm max centres, anti-sway brackets installed at each end of a run and at max 20m intervals for brackets of 260mm and above

Liner side laps sealed using SD Seal, end laps sealed using 6x5mm butyl bead

Liner 50mm air-seal under-profile fillers installed at eaves, ridge, hip valley, 2 No. screws per pan, bedded in butyl gun grade sealant

Liner sealed and stitched to all perimeters and penetrations

StramCheck (if used) sealed, using 1.5mm x 20mm butyl tape, minimum 75mm laps, sealed at roof edges, perimeters, penetrations etc

Insulation continuous/dry/no gaps, tucked under and around spacer (including at ridges/hips etc). Check insulation fills cavity

Rooflight liner 3.0kg/m<sup>2</sup>(3.6kg/m<sup>2</sup> if R<70). Fixed using 30mm sealed washers, 8 No. per sheet at end laps, 4 No. per sheet at intermediate support (non-fragile Class B to ACR [M]001:2000)

#### Checklist for SpeedDeck

Starter clips on full SpeedDeck clips at start of roof areas? (at verge, R/L, etc)	
1/2 clips at end of SpeedDeck areas? (i.e. verge, R/L, etc)	
2 No. SDS20 screws per SD clip (4 No. for timber) using screws supplied by SpeedDeck	
Double clip at eaves (curved roofs only)	
SpeedDeck gauging template being used	
SpeedDeck cantilever 125-300mm from centre of clip (at either end of sheet)	
1/2 clips used at every rib on valleys, valleys securely fixed	
Pan fixing at hip	
Eaves/valley turn down 20 <sup>2</sup> angle trim, if used, fixed under eaves, 2 No. rivets per pan.	
Ribs fully engaged together, rib to rib	
Ribs locked onto clip	
Ridge cap fixed to every rib	
Fixed point fixing at ridge/hip/apex (of curved roof)	
Short sheets (single spans) screw fixed	
70-100mm clear SpeedDeck overhang at eaves	
Turn-up at ridge/hip	
40mm down turn leg to all flashings	
Verge flashing fixed to verge zed at 450mm max. centres, not to SpeedDeck rib	





### Section 5 Eaves Details

- 1. 40mm downturn to flashing.
- 2. 50mm deep galvanised steel zed support flashing. Flashing fixed to zed not rib. Zed fixed to spacer using hex head screws. Zed is NOT fixed through SpeedDeck.
- 3. Seal between rib and zed, plus between zed and flashing.
- 4. Starter clip adaptor fitted on SpeedDeck clip.
- 5. Perimeter of liner stitched at 450mm centres and sealed to perimeter trim using Butyl strip sealant.
- 6. Fixings ("Bulbtite" rivets or stainless steel screws plus washers) at 450m centres maximum.
- 7. IsoBar bracket and rail system.
- 8. Quilt insulation.
  - N.B. Always use SpeedDeck supplied accessories.









### Section 5 Eaves Details

- 1. SpeedDeck clip, fixed using SDS20 screws provided via centre holes. (For timber use 4 No. outer holes)
- 2. SpeedDeck vented filler block.
- 3. Overhang 125mm minimum, 300mm maximum.
- 4. Clear overhang, 70mm minimum, 100mm maximum.
- 5. Turn down 20° plus, necessary at all pitches to stiffen sheet end and improve runoff. Alternative eaves angle stiffener, fixed in every pan, include turn down at pitches <10°.
- 6. SD100 breather membrane (optional) drains over or under eaves flashing.
- 50mm solid WalkLiner airseal filler block, beded in butyl gun grade sealant, avoids draughts and energy loss. Fix WalkLiner through filler using 2 No. screws plus 15mm washer per pan to achieve best seal.
- 8. StramCheck (optional) with all laps sealed, and also sealed to upstands, penetrations etc.
- 9. WalkLiner with sealed laps, drain at eaves if possible. Sealed to perimeters. (Note: WalkLiner laps must be sealed, even if StramCheck membrane is used).
- 10. 2 No. screws per IsoBar bracket.
- 11. IsoBar bracket and rail system.
- 12. Quilt insulation to fill cavity.
- 13. Gutter liner and insulated gutter.
- N.B. Always use SpeedDeck supplied accessories





## Section 5 Eaves Details





### **Speed Deck**<sup>®</sup> Fixing and Handling Guide

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- 1. 40mm turn down to flashing, notched over ribs.
- 2. SpeedDeck vented filler block with ridge flashing fixed to every rib via filler block using Bulbtite rivets or stainless steel screws with sealing washers.
- 3. SpeedDeck clip.
- 4. Turn up of SpeedDeck pan to vertical.
- 5. Fixed point fixing; if pitch <5° SDS20 through under rib to clips, or if pitch > 5°, stainless steel hexagonal head screw plus washer in each pan.
- 6. 50mm solid Walk Liner air seal filler block, bedded in butyl sealant, under spacer and secured by liner fixings. (Note: 2 No. liner fixings per pan at ridge).
- 7. Ridge flashing.
- 8. Internal ridge closer.
- 9. StramCheck vapour control layer (optional) continuous over ridge.
- 10. SD100 breather membrane (optional) continuous over ridge.
- 11. Isobar bracket and rail system.
- 12. Quilt insulation to continue over ridge with no gaps.
- N.B. Always use SpeedDeck supplied accessories.







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All information is correct as of the date of this document, created May 2020.