

DUREY CASTINGS LIMITED 01322 272424



ROADSHIM® PLANKS | CHAMBER COLLARS | REPAIR BUNGS | SPECIAL PRODUCTS | ANCILLIARIES

SHIMPAC® Systems - ROADSHIM® PLANKS

The Industry Standard for fast, simple and cost effective ironwork seating and levelling; SHIMPAC® ROADSHIM® planks have a highly successful track record for seat street ironwork, communications equipment, inspection covers and many more similar applications.

SHIMPAC® ROADSHIM® planks, in conjunction with a high strength fast setting mortar, secure chamber tops and provide the strongest of platforms for ironwork, handling extreme weather conditions and heavy road use, it ensures that ironwork installations and repairs last years without further attention.

SHIMPAC® ROADSHIM® planks are quick and easy to install, can be adjusted to size on site without the need for specialist tools and are compatible with fast setting mortar. The product range comes in various thicknesses, allowing the contractor to build up the area beneath the frame to achieve the correct level. Designed specifically to secure the chamber top and provide a platform to bed and level any ironwork to exactly the right height and angle.

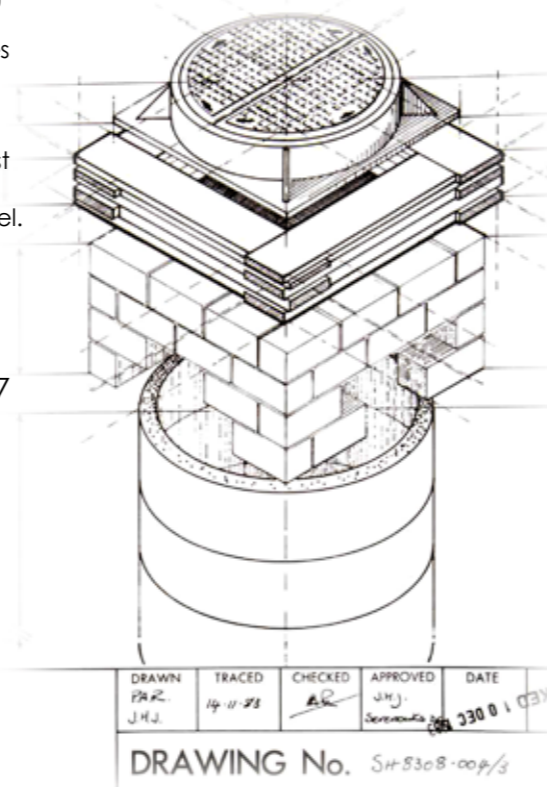
FEATURES

- Complies with Highways Authority Standard HA104/09 ch. 6&7
- Whole life solution
- 30 years with no recorded failures
- Cost effective and easy to use
- Virtually no remedial work
- Very high compression resistance
- Exceptional lateral strength and sheer resistance
- Unique ironwork levelling capability
- Recyclable
- Can be used to repair and finish broken and damaged chamber tops

SHIMPAC® Systems ROADSHIM® planks are approved for use by Councils, Utility Companies, Highway and Transport Authorities and Civil Engineers.

SHIMPAC® Systems ROADSHIM® planks comply with requirements of the Highway Agency Specification HA104/09 ch.6&7.

Since the first installation of SHIMPAC® Systems ROADSHIM® planks in 1984 there has been no known failure.



Highways Authority Standard
HA104/09 ch. 6&7

European Standards
EN 634-1 & EN 634-2



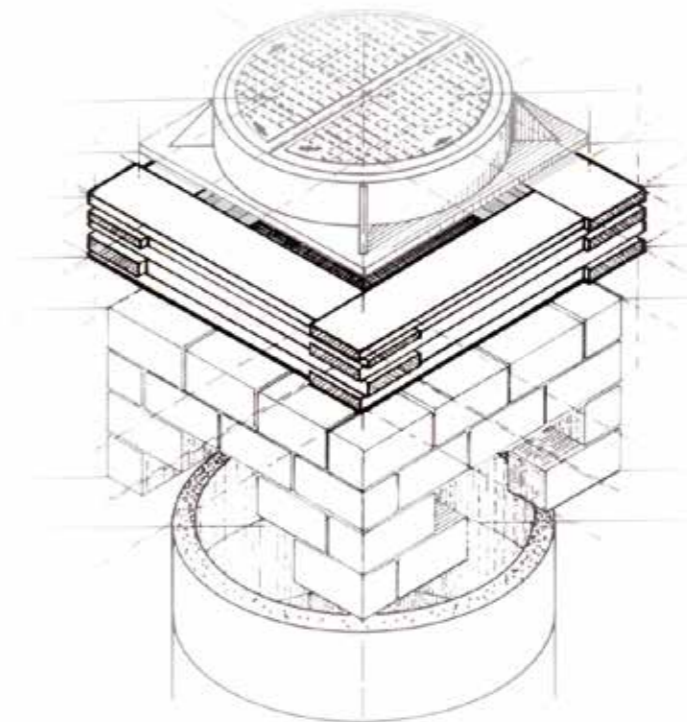
Declaration of Performance:-
DoP No: 1034- CPR- 2157/1/2014
Harmonised standard EN 13986:2004



installation guide

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Ironwork + SHIMPAC®



simple

fast, effective,
ironwork seating and levelling

The SHIMPAC® system

ROADSHIM® PLANKS

CHAMBER COLLARS

REPAIR BUNGS

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INSTALLATION GUIDE

Complies with requirements of the Highways Agency Specification HA104/09. Approved for use by Civil Engineers, Highway Authorities and Utility Companies.

PURPOSE

To raise exactly to road and pavement surface level, seat and prevent ironwork being dislodged, loosened or subsiding below the level of the carriageway due to compaction, shear from traffic, undermining from water, flooding, frost or breakdown of the mortar bed or chamber top damage.

MATERIALS

- SHIMPAC® System ROADSHIM® planks or collars
- Fast Set Mortar
- Tarmac

SHIMPAC® System products are compatible with mortar and can be installed using approved fast setting mortar.

SHIMPAC® System products are intended for external use and have a very high level of performance in the presence of moisture. SHIMPAC® planks, collars and bungs are a combination of compressed cement (70%), treated wood fibres (15%) and proprietary bonding materials. SHIMPAC® System products will not rot and are able to withstand the destructive influences of weather, moisture, insects, vermin and fungi.

SHIMPAC® System products are robust against impact, have a very high compression resistance and will not build up static charges.

SHIMPAC® System products Health and Safety information and COSHH data sheet is available on request.

METHOD

For the use of SHIMPAC® ROADSHIM® planks a pre-compressed cement based plank system to create a "laminated lintel" or "collar" to seat and level street ironwork.

STEP - Preparation

1.

New installations.

- During road surfacing leave rectangular hole in the road surface at least 300mm from the edge of any chamber top
- Create a 150mm flat and level surround to the chamber top

Full resurfacing.

- During road re-surfacing leave rectangular hole in the road surface at least 300mm from the edge of any chamber top or old ironwork and large enough to include any cracked, broken or sunken road surface.
- Lift existing ironwork and remove old bedding material from chamber top.
- Clean away any old and loose matter from the exposed area around the chamber top.
- Repair minor cracks and breakages in brick or concrete chamber top with fast set mortar
- Create a 150mm flat and level surround to the chamber top

Remedial work.

- Cut as near rectangular hole in the road surface at least 300mm from the edge of the existing iron work and large enough to include any cracked, broken or sunken road surface.
- Lift existing ironwork and carefully remove old bedding material from chamber.
- Repair minor cracks and breakages in brick or concrete chamber top with fast set mortar

STEP - Selecting correct SHIMPAC® ROADSHIM® planks

2.

Calculate the correct combination of SHIMPAC® ROADSHIM® plank thicknesses needed to raise the desired ironwork and bring the top of the ironwork level with the road or path surface.

- Measure height from top of chamber to road surface.
- Deduct the height of the ironwork.
- "a)" less "b)" gives the height to be filled with ROADSHIMs®
- Select thickness of ROADSHIM® plank(s) to fill space between chamber top and ironwork, remembering to allow for a thin bed of mortar (fast-setting or traditional mix approx 5-10mm to each layer to give total thickness achieved by the chosen ROADSHIMs® and mortar.
- Recheck to ensure the selected ROADSHIMs® and mortar do not exceed the available space

SHIMPAC® Systems:-
ROADSHIM® Planks

Standard Sizes

875mm x 100mm

810mm x 100mm

690mm x 100mm

610mm x 100mm

Standard thicknesses

8mm

12mm

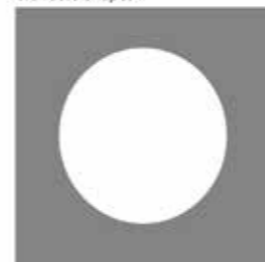
18mm

24mm

36mm

SHIMPAC® Systems:-
ROADSHIM® Chamber Collars

Standard Shapes



installation guide



SHIMPAC® ROADSHIM® planks standard thicknesses guide

- 8mm ROADSHIM® + mortar = 13mm
- 12mm ROADSHIM® + mortar = 17mm
- 18mm ROADSHIM® + mortar = 23mm
- 24mm ROADSHIM® + mortar = 27mm
- 36mm ROADSHIM® + mortar = 39mm

[NOTE 1. - Height of an engineering brick + mortar = 70mm]

[NOTE 2. - To conform with Highways Authority HA104/09 do not exceed mortar thickness 25mm. Exceeding 25mm thickness of mortar will also reduce the effectiveness of the ROADSHIM® seating.

STEP - Preparing SHIMPAC® ROADSHIM® seating

3.

- Cut away all loose cracked and broken tarmac and road materials surrounding the chamber top.
- Where applicable repair chamber top cracks and loose construction material, ROADSHIM® planks can be used to refurbish and reinforce chamber tops if needed.
- Leave clean surfaces free from detritus, silt soil or gravel.
- Ensure a sound base for laying SHIMPAC® ROADSHIM® planks
- Check that the selected SHIMPAC® ROADSHIM® planks are available and to hand (see step 2).
- Prepare prepared proprietary brand fast set mortar of a grade fit for purpose

[NOTE 3. - SHIMPAC® System products can be cut on site Cutting

- Tungsten tipped saw (where necessary)
- Stihl saw I disc cutter
- Planks up to 24mm thickness can be scored and snapped to length]
- SHIMPAC® ROADSHIM® planks may also be planed, sanded, drilled, routed, nailed, screwed and bolted with washers]

STEP - Constructing SHIMPAC® ROADSHIM® frame and levelling

4.

Standard construction of a SHIMPAC® System seating frame and lintle.

1. Bed SHIMPAC® ROADSHIM® planks onto prepared chamber top on thin bed of mortar.
2. SHIMPAC® ROADSHIM® planks can then be built up to the required thickness to seat iron work at the correct height interspersed with approximately a 5-10mm layer of fast-set mortar.
3. If more than one layer of planks is required install using a thin cement bed to "stick" second layer to first layer ensuring that planks are cross lapped at corners.
4. Finish the top layer of laid SHIMPAC® ROADSHIM® planks with a final approximate 5-10mm layer of fast-set mortar.

[NOTE 4: - ROADSHIM® planks should NOT be used without mortar bedding above and below each plank.]

[NOTE 5: - When carrying out installations on heavily trafficked roads or where residual water can be expected in the chambers, ROADSHIM® planks should only be installed using a proprietary brand high strength fast-setting mortar and not sand/cement mortar.]

Adjusting, Leveling and Tilting a SHIMPAC® System seating frame and lintle.

1. Using strategically placed 8mm or 12mm ROADSHIM® planks between layers in a standard SHIMPAC® System ironwork seating it is possible to tilt or angle the seating frame to ensure the top of the ironwork matches the camber in the highway or surface of any pavement or walkway.
2. As each layer is laid, lay an 8mm or 12mm ROADSHIM® plank on the appropriate side of the frame on the normal application of fast-set mortar and infill the wedge shaped gaps with further application of mortar.
3. Lay the next full layer of ROADSHIM® planks to complete the construction.

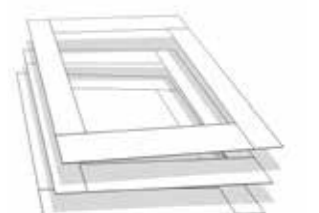
[NOTE 6:- do not use ROADSHIM® planks thicker than 12mm for leveling]

[NOTE 7:- ROADSHIM® planks may be tapered to give the best angles. It is stronger and more stable to taper planks than to try to use excessive amounts of mortar]

STEP - Finishing and closing SHIMPAC® ROADSHIM® installation

5.

1. Check and point the inside face of the assembled and installed ROADSHIM® plank frame where applicable.
2. Apply approximately a 5-10mm layer of fast-set mortar to the top of the frame
3. Seat ironwork [do not move once located]
4. Fill in, make good and haunch as normal to at least 150+mm of the area surrounding the sound or repaired chamber covering edges of both the installed SHIMPAC® ROADSHIM® planks and the base of the ironwork
5. Coat exposed edges of surrounding cavity, sides of ironwork and haunch with tar to seal and bond
6. Infill with tarmac and, roll and finish.



Standard cross lap layout



Tilting, leveling, angling

