



T-SADDLE

COUPLINGS & SEALS

Multimaterial saddles

- Connecting new branches to existing pipes.
- **Multimaterial** : connect to all smooth surfaces from DN 160 to DN 2000.
- **Easy to install** : just use a screwdriver or ratchet spanner.
- **Watertight** : pressure-resistant up to 0,6 bar.



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T-SADDLE

COUPLINGS & SEALS

→ INTRODUCTION

AREA OF USE

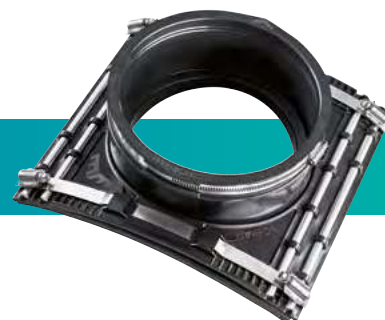
Multi-material, T-SADDLE saddles fit all smooth pipes (PVC, cast iron, fibre cement, concrete, steel, GRP, clay, HDPE), from DN 150 to DN 2000*, for 100 mm, 125 mm, 160 mm and 200 mm diameter saddles.

They can be installed above or below ground, and are designed for rainwater networks, gravity drainage and sewage systems.

**From DN 150 to DN 600, saddles available as standard. From DN 630 to DN 2000, made-to-measure, please contact us.*



NEW DESIGN



POLYPROPYLENE HOMOPOLYMER (PPH) PLATE :

- recyclable material ;
- very good resistance over time ;
- no welding, reduces the risk of corrosion.

STOPPER

inside the branch to prevent the pipe from entering the collector.

RIBBED EPDM RUBBER :

- improved contact with the pipe ;
- optimised pressure resistance.

AISI 304 STAINLESS STEEL CLAMPS :

- T-SADDLE 100 to 160 : with sliding zip ;
- T-SADDLE : HI-TORQUE fixing ;
- clamps cover several DN ;
- optimise clamping and pressure resistance

CLIP-IN

the system, profiled in the rubber, holds the clamp in place to facilitate handling and installation.

ROUND SECTION REINFORCEMENT

made of AISI 304 stainless steel for greater rigidity, ensures better adhesion of the ribbed rubber..

CENTRING LIP

on the back of the elastomer part. Ideal for centring the T-SADDLE in the core of the collector..

FRENCH
design and manufacture

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TECHNICAL DATA

- **Pressure resistance** : 0,6 bar (6 mWG) ;
- **Angular deviation** : $90^\circ \pm 15^\circ$;
- **Multimat erial connections** : all smooth materials, PVC, PP, HDPE, GRP, cast iron, fibre cement, steel, clay and concrete.

MATERIALS

- **Plate** : homopolymer polypropylene (PPH), recyclable ;
- **Clamps and round section reinforcement** : AISI 304 stainless steel ;
- **Seal** : in EPDM 60 Sh IRHD, grade WG, compliant with standard NF EN 681-1.

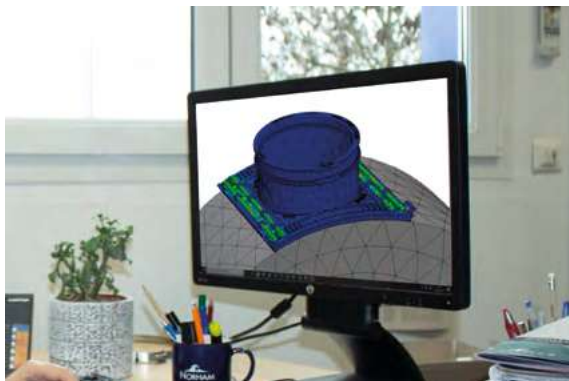
CERTIFICATIONS AND TESTS

NORHAM TESTS

The new T-SADDLE is designed by our R&D department.

It has the necessary CAD calculation resources **to model the hydraulic and mechanical behaviour** of each saddle.

Each new design is also tested on test benches to validate its behaviour under maximum pressure (tightness and pressure resistance).



Study and validation of mechanical stresses during pressurisation.



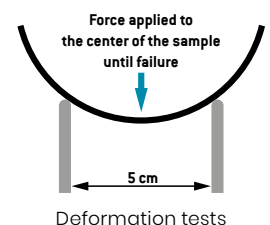
Tightness and pressure resistance tests on NORHAM's test bench.

LABORATORY TESTS

To assess the durability of T-SADDLE branch saddles, the ALS laboratory carried out tests using the following protocols:

- **salt spray ageing** : the samples were placed in a «neutral salt spray» chamber without prior treatment for a period of 1,000 hours (observation of corrosion in accordance with standard ISO 4628-3);
- **UV resistance (up to 1,000 hours)** : the samples are placed in a QUV chamber, then in a condensation chamber without prior treatment for a period of 1000 hours (observation in accordance with standard ISO 4892-3).
- **deformation test** : 3-point bending test on the sample carried out after the UV tests.

T-SADDLE saddles passed all these tests with flying colours.



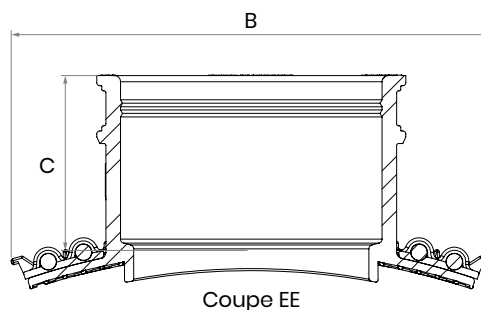
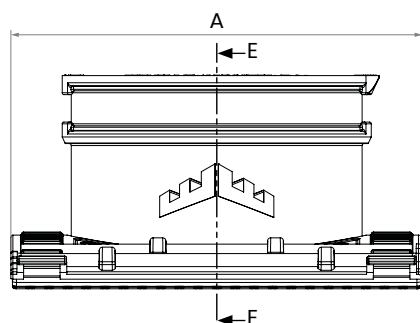
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→ THE RANGE

T-SADDLE RANGE FROM DN 100 TO DN 200

REF.	OUTLET RANGE	Ø EXT. COLLECTOR	DEFLECTION ANGLE	DRILLING Ø	A	B	C	W _p
T-FLEX100L	100-110	160-540	90+/-15°	112-118	195	215	95	0,6
T-FLEX125L	115-125	200-540		127-133	205	240	95	
T-FLEX160L	150-160	250-540		165-173	250	280	100	
T-FLEX200X	180-200	300-630		200-210	300	320	100	



For collectors with diameters greater than 630 mm, customised clamping bands are available (please contact us).

DRILLING ACCESSORIES

NORHAM drilling solutions for all T-SADDLE saddles, suitable for all types of collectors.

REF.	DESCRIPTION
1 SCREWDRIVER	Screwdriver for tightening clamps, with CR-V 8 bit
2 DIAMOND CORING BIT ⁽¹⁾	For reinforced concrete, GRP, clay and cast iron
5 SHAFT FOR CORING BIT ⁽¹⁾	-
3 HOLE SAW ⁽¹⁾	For PVC, PP, HDPE (all steels)
4 SHAFT FOR HOLE SAW ⁽¹⁾	-



TÉLÉCHARGEZ LA DOCUMENTATION

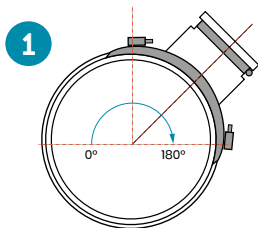
(1) See Drilling Solutions sheet, available on request or scan the QR code.

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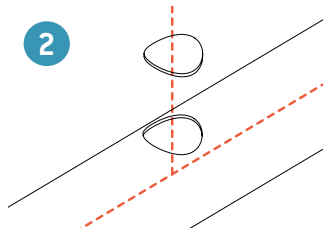
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→ INSTALLATION

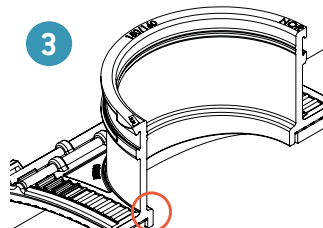
T-SADDLE saddles can be installed very quickly. No special preparation is required before installation. Simply cleaning out the pipe is sufficient.



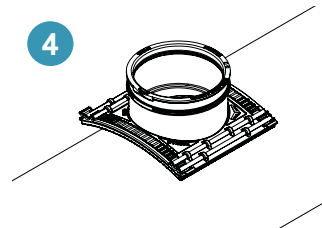
1 Locate the centre of the branch.



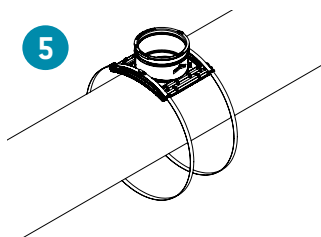
2 Using a core drill, drill a hole perpendicular to the surface of the pipe.



3 Check that the lip on the underside of the T-SADDLE fits snugly into the hole.

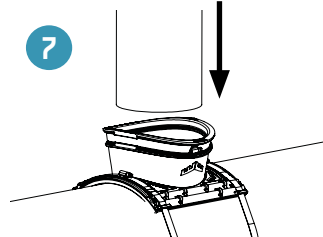
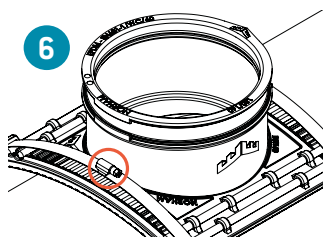


4 Position the saddle's body.

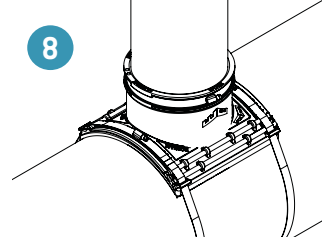


5 Fit the tension bands. The tension band can be slid into place by turning the screw on the clamping head. Tightening :

- if the \varnothing of the collector is ≥ 400 mm, tighten to 8 Nm ;
- if the \varnothing of the collector is < 400 mm, tighten to 6 Nm.



7 Insert the branch pipe and tighten to a torque of 6 Nm.



8 The T-SADDLE is now installed.

→ OTHER NORHAM SOLUTIONS

T-SADDLE MULTI



T-SADDLE MULTI ON CONCRETE PIPE



T-SADDLE MULTI ON CORRUGATED PIPE

Saddles for multimaterial branches for all types of collectors (smooth or corrugated) from DN 400 to DN 1200, with branch outlets in diameters 250 or 315.



DOWNLOAD DOCUMENTATION



N O R H A M



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