

1. SCOPE

This schedule specifies requirements for the ULTRA3 inlet saddle for the in situ connection of DN125 and DN160 (OD) lateral connections to solid wall EN1401-1 PVC-U pipes, or structured wall EN13476-2 PVC-U pipes for gravity sewers as manufacture by DYKA and distributed by JDP.

This Assessment Schedule applies to the use of the ULTRA3 inlet saddle with plastics sewer pipes of stiffness SN8 (SDR34).

2. PRODUCT DESCRIPTION

2.1 Introduction

The ULTRA3 inlet saddle enables a secure and leak tight lateral connection to be made to a larger sewer or surface water pipe without the need to fully excavate and disturb the bedding.

The body of the ULTRA3 inlet saddle comprises of inner and outer moulded PVC-U sections. The lower section locks into the sewer pipe and the upper section is compressed into the lower section by levers to form a leak tight seal.

EPDM seals are located between the lateral connection point and the saddle and at the connection with the host pipe.

The product range is,

- 125mm outlet diameter:-
Pipe Range 200 – 400mm diameter
- 160mm outlet diameter:-
Pipe Range 250 – 630mm diameter

The ULTRA3 inlet saddle may be used for connecting laterals made of SN8 solid wall and structured wall plastic pipe

2.2 Relevant Standards

Performance: the following relevant standards were identified:

- BS EN 476: 2011⁽¹⁾ General requirements for components used in drains and sewers.

Materials: Materials used shall comply with:

- BS EN 13598-1:2010(2) Plastic piping systems for non-pressure underground drainage and sewerage. - Unplasticized poly(vinyl chloride) (PVC-U),
- Elastomeric components to BS EN 681-1:1996⁽³⁾

2.3 Approval History

This is the first approval of the ULTRA3 inlet saddle connector.

3. TESTING AND REQUIREMENTS

3.1 Type Testing

The ULTRA3 inlet saddle shall comply with the following test requirements:

- BS EN 476: 2011

Materials: The ULTRA3 INLET SADDLE shall be produced from:

- Elastomeric components to BS EN 681-1:1996⁽³⁾.
- BS EN 13598-1:2010

Mechanical/Physical: When tested in accordance with the test methods specified in Tables 1, 2 and 6 of BS EN 13598-1:2010(4), the connection system shall have mechanical characteristics conforming to the requirements given in those tables

Tolerance: The manufactured connection system shall be of sufficient tolerance to ensure a correct fit in a hole of the specified diameter ± 1 mm.

Table 1 Mechanical characteristics of fittings from BS EN 13598-1:2010 Clause 9: Table 2

Test Type	Test Method	Requirement
Mechanical strength of saddle assembled to pipe	EN 12256 and Annex B	As per Table 3 and Annex B

Table 2 Physical characteristics of fittings from BS EN 13598-1:2010 Clause 8: Table 1

Test Type	Test Method	Requirement
Effects of heating	EN ISO 580: Air oven	As per Table 15

Leak tightness: When tested for tightness of elastomeric sealing ring joints, in accordance with the test methods specified in in Table 6 of BS EN 13598-1:2010, Table 16 connections to plastics laterals shall have leaktightness characteristics conforming to the requirements given in that table. The requirements have been summarised in Table 3.

Table 3 Performance requirements of mechanical saddles from BS EN 13598-1:2010 Clause 10: Table 6

Test Type	Test method	Requirement
Tightness	EN 1277	As per table 6

Resistance to High Pressure Water Jetting: When tested in accordance with WIS 4-35-01, Appendix B. The high pressure water jet is applied for 120 seconds and shall meet the minimum requirement of 180 Bar (2600 psi); there shall be no penetration through the wall of the fitting.

3.2 Product Design

The ULTRA3 inlet saddle system shall be designed in accordance with those standards quoted in section 2.2.

3.3 Manufacture

To ensure the quality and performance of ULTRA3 inlet saddle, the manufacturing process shall include appropriate systems for:

- Verification of component materials received are to specification
- Handling and storage of all component materials and finished units
- Records of the ULTRA3 inlet saddle
- Detailed drawings for the ULTRA3 inlet saddle
- Inspection and maintenance of the ULTRA3 inlet saddle
- Fabrication of bespoke sections and quality of workmanship

The production of ULTRA3 inlet saddle and related Quality Control procedures shall comply with requirements to ensure the stated performance of the product is reliably achieved.

3.4 Installation

When installed in accordance with the installation documentation⁽⁴⁾, the installation shall be practicable and suitable for

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Assessment Schedule for the ULTRA3 inlet saddle as manufactured by DYKA



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conditions that could reasonably be expected on site.

4. APPROVAL

The ULTRA3 inlet saddle has been audited and has successfully met all the requirements stated within this assessment schedule.

Signed:

A handwritten signature in black ink, appearing to be 'JTB', written over a horizontal line.

Valid until 17 June 2025

REFERENCES

- 1) BS EN 476:2011 General requirements for components used in drains and sewers. 2011
- 2) BS EN 13598-1:2010(2) Plastic piping systems for non-pressure underground drainage and sewerage. - Unplasticized poly(vinyl chloride) (PVC-U).
- 3) BS EN 681-1:1996 Elastomeric seals. Materials requirements for pipe joint seals used in water and drainage applications. Vulcanized rubber. 1996
- 4) ULTRA3 inlet saddle Installation manual.