



ERA Piping (Zhejiang) Co Ltd

PRODUCT APPRAISAL REPORT 2034 Issue 2

ERA PVC-U DWV Pipes and Fittings

AS/NZS 1260:2017 PVC-U pipes and fittings for drain, waste and vent applications

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Overview of WSAA

The Water Services Association of Australia (WSAA) is the peak industry body representing the urban water industry. Our members provide water and sewerage services to over 20 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Based around our vision of 'customer driven, enriching life', WSAA facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. We are proud of the collegiate attitude of our members which has led to industry-wide approaches to national water issues.

WSAA can demonstrate success in the standardisation of industry performance monitoring and benchmarking, as well as many research outcomes of national significance. The WSAA Executive retains strong links with policy makers and legislative bodies and their influencers, to monitor emerging issues of importance to the urban water industry.

WSAA was formed in 1995 as a non-profit organisation to foster the exchange of information between industry, government and the community, and to promote sustainable water resource management.

The urban water industry is committed to anchoring its services to customers' values, and to enrich communities where water services have broad economic, environmental and social values. In line with this our main activities focus on four areas:

1. influencing national and state policies on the provision of urban water services and sustainable water resource management
2. promoting debate on environmentally sustainable development and management of water resources and the community health requirements of public water supplies
3. improving industry performance and establishing benchmarks and industry leading practices for water service processes; and
4. fostering the exchange of information on education, training, research, water and wastewater management and treatment and other matters of common interest.

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1 EXECUTIVE SUMMARY

ERA Piping (Zhejiang) Co Ltd is part of ERA Co Ltd, a leading manufacturer of PVC, CPVC, PE, PP and PPR piping systems. Their range of ERA branded DWV fittings are distributed in Australia by Fusion QLD Pty Ltd and Aztec Australasia Pty Ltd.

This Issue 2 is to change the name of the Applicant from Yonggao Co Ltd to ERA Piping (Zhejiang) Co Ltd. There is no change to the ownership, manufacturing site or manufacturing procedures. Some additional fittings have also been added to the scope and quality certificates updated.

This Appraisal is for a range of plain wall PVC-U pipes and fittings manufactured to AS/NZS 1260:2017 *PVC-U pipes and fittings for drain, waste and vent applications*.

The Solvent Cement Joint (SCJ) range includes pipe, bends, junctions, tapers, couplings and other associated fittings in sizes DN 100 and DN 150.

The DN 150 pipe included in the scope of this appraisal is rated as SN8 and the wall thicknesses of the fittings are 3.1mm for DN 100 and 4.1 mm for DN 150. See Sections 6.2.2 and 11.

See Section 4 for details of products included in the scope.

ERA pipes and fittings are manufactured in accordance with the Best Environmental Practice PVC requirements specified in AS/NZS 1260 Appendix C.

ERA Piping (Zhejiang) Co Ltd has a quality management system certified to ISO 9001:2015.

The pipes and fittings are covered by ISO Type 5 StandardsMark product certification to AS/NZS 1260:2017.

The ERA PVC-U DWV injection moulded fittings included in this appraisal report meets the requirements of WSA PS 230 *Polyvinylchloride, Unplasticised (PVC-U) Pipes and Fittings for Non-Pressure Applications – Sewerage and Drainage* and are therefore deemed as 'fit for purpose'.

1.1 Recommendations

It is recommended that WSAA members, subject to any specific requirements of the member, accept or authorise the ERA range of PVC-U DWV solvent cement joint pipes and fittings, as detailed in this report, for use in gravity sewerage and drainage applications, provided they are installed in accordance with WSAA Codes and the manufacturer's requirements, where specified.

2 THE APPLICANT

The Applicant is ERA Piping (Zhejiang) Co Ltd.

2.1 The Manufacturer

ERA Piping (Zhejiang) Co Ltd, based in Zhejiang China, is part of ERA Co Ltd, a leading manufacturer of PVC, CPVC, PE, PP and PPR piping systems and is a leading manufacturer of PVC, CPVC, PE, PP and PPR piping systems. ERA is equipped with 250 extruders and 800 injection moulding machines with product exported to more than 160 countries around the world.

Their range of ERA branded DWV fittings are distributed in Australia by Fusion QLD Pty Ltd and Aztec Australasia Pty Ltd.

3 THE PRODUCT

This Appraisal is for a range of plain wall PVC-U pipes and fittings manufactured to AS/NZS 1260:2017 *PVC-U pipes and fittings for drain, waste and vent applications*.

The Solvent Cement Joint (SCJ) range includes pipe, bends, junctions, tapers, couplings and other associated fittings in sizes DN 100 and DN 150. The DN 150 pipe included in the

scope of this appraisal is rated as SN8 and the wall thickness of the fittings are 3.1mm for DN 100 and 4.1 mm for DN 150. See Section 4 for details of products included in the scope.

The pipes are manufactured with 6m effective length.

4 SCOPE OF THE APPRAISAL

The range of plain wall ERA PVC-U DWV solvent cement joint pipes and fittings included in the Scope of this Appraisal is detailed below in Table 1 and is included in the Type 5 StandardsMark Product Certification schedule. See Appendix B.

The DN 150 pipe included in the scope of this appraisal is rated as SN8. The wall thicknesses of the fittings are 3.1mm for DN 100 and 4.1mm for DN 150 which meets AS/NZS 1260 required minimum wall thicknesses of 3mm and 4mm respectively.

TABLE 1: ERA PVC-U DWV SCJ PIPE AND FITTINGS

Product Code	Product Description	DN
AUD001	Pipe SN8	150
AUDC01	Access Coupling	100, 150
AUDC02	Coupling F/F	100, 150
AUDC03	Coupling, slip with rubber	100, 150
AUDC04	Coupling, long	100
AUD013	Spigot Adaptor	100
AUDR04	Reducing Coupling M/F	100
AUDE015	11° Bend M/F	100
AUDE013	15° Bend M/F	100
AUDE014	22° Bend M/F	100
AUDE018	30° Bend M/F	100
AUDE021	42° Bend M/F	100
AUDE06	45° Bend M/F	100
AUDE010	88° Bend M/F	100
AUDE020	90° Bend M/F	100
AUDE09	5° Bend F/F	100
AUDE017	11° Bend F/F	100
AUDE011	15° Bend F/F	100
AUDE019	22° Bend F/F	100
AUDE012	30° Bend F/F	100
AUDE03	45° Bend F/F	100, 150
AUDE016	60° Bend F/F	100
AUDE01	88° Bend F/F	100, 150
AUDE05	45° Bend F/F with Side Access	100
AUDE04, AUDE023	88° Bend F/F with Side Access	100
AUDE02	88° Bend F/F with Rear Access	100

Product Code	Product Description	DN
AUDF02	Flange	100
AUDI02	Inspection Test Opening M/F	100
AUDI01	Inspection Test Opening F/F	100
AUDI03	Inspection Test Opening F/F, 1 socket thread	100
AUDR02	Level Invert Taper M/F	150 - 100
AUDT06, AUDT010	45° Junction F/F	100
AUDT011	45° Reducing Junction F/F	150 x 100
AUDT02	45° Junction M/F	100
AUDT03	45° Junction F/F	100
AUDT04	45° Junction F/F with left access	100
AUDT05	45° Junction F/F with right access	100
AUDT012	88° Sweep Junction F/F	150
AUDT013	45° Junction F/F and threaded end	150
AUDT08, AUDT014	88° Junction F/F	100
AUDT07, AUDT018	88° Junction F/F with side access	100
AUDT021	45° Junction F/F with side access	100
AUDT022	45° Junction F/F with side access	100
AUDT023	88° Junction F/F with side access	100
AUDT09	88° Junction M/F	100
AUDT01	88° Sweep Junction F/F	100
AUDT024	Coupling F/F	100
AUDW03	Threaded Cap	100, 150
AUDT017	Snap Tee	100
AUDW01	Dust Cap	100, 150

5 APPRAISAL CRITERIA

5.1 Quality Assurance Requirements

The WSAA Product Appraisal Technical Advisory Group accepts PVC-U moulded fittings manufactured in compliance with AS/NZS 1260:2017 *PVC-U pipes and fittings for drain, waste and vent applications* and duly certified by means of an ISO Type 5 product certification scheme undertaken by a JAS-ANZ accredited Conformity Assessment Body (CAB) or by an international accreditation system recognised by JAS-ANZ.

The manufacturer is generally expected to have a production management and control system that has been duly accredited in accordance with AS/NZS ISO 9001 as a prerequisite to undergoing a product certification audit.

The ISO Type 5 Product Certification Scheme shall meet the criteria described in WSAA Technical Note WSA TN-08.

5.2 Performance Requirements

ERA injection moulded PVC-U fittings have been appraised for compliance with AS/NZS 1260:2017 *PVC-U pipes and fittings for drain, waste and vent application*.

Appraisal criteria are also determined by the WSAA Product Appraisal Technical Advisory Group and regularly reviewed to ensure that the criteria reflect the requirements of WSAA members.

The following Product Specification is also relevant to this application:

WSA PS 230 *Polyvinylchloride, Unplasticised (PVC-U) Pipes and Fittings for Non-Pressure Applications – Sewerage and Drainage*.

A copy of the Product Specification is available at the following link:

<https://www.wsaa.asn.au/shop/product/60961>

6 COMPLIANCE WITH APPRAISAL CRITERIA

6.1 Compliance with Quality Assurance Requirements

ERA has submitted the following quality certificates:

- ISO 9001:2015 Certificate of Registration No. ZRC22Q0196R0S issued to ERA Piping (Zhejiang) Co Ltd by Guangdong Zhongren Lianhe Certification Co Ltd.
- AS/NZS 1260:2017 ISO Type 5 StandardMark Product Certification Licence No. SMK26022 issued to ERA Piping (Zhejiang) Co Ltd by SAI-Global.
- AS/NZS 1260:2017 Best Environmental Practice Certification No BEP-AMI 78010 issued to ERA Piping (Zhejiang) Co Ltd by ApprovalMark International.

Copies of the quality assurance and product certification licences have been included in Appendix B and are also available from WSAA.

6.2 Compliance with Performance Requirements

6.2.1 Type tests for moulded fittings

The National Centre for Supervision and Inspection of Drainage Irrigation and Water Saving Equipment Products Quality (CNAS accreditation number L0606) has completed type testing in accordance with the requirements of AS/NZS 1260 for a range of various PVC-U fittings. The type tests include PVC content, TiO₂ content, colour, and softening temperature for the material, dimensional checks including thicknesses and performance tests including hydrostatic pressure, infiltration and high temperature stress relief.

Results comply with AS/NZ 1260.

6.2.2 Wall thickness

The minimum wall thickness for moulded fittings is specified in AS/NZS 1260 as 3mm for DN 100 and 4mm for DN 150. ERA drawings confirm that DN 100 and DN 150 fittings have minimum 3.1mm and 4.1mm wall thicknesses respectively.

6.2.3 Solvent cement

Solvent cement is available from the Australian distributors. Solvent cement and priming fluid for use with tapered socketed fittings shall be Type N¹ or Type G² complying with AS/NZS 3879:2011.

¹ Type N is used for jointing PVC pipe systems with tapered/interference fit joints which will not be subjected to internal pressure or other applications where high bond strength is not required.

² Type G is used for joining PVC and ABS pressure or non-pressure pipes where parallel/no or low interference fit joints are used and where a high bond strength and ability to fill small gaps is required.

7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION

PVC-U DWV pipe has been a commonly used product in the urban water industry for many years and pipe layer training is readily available.

Installation, repair and maintenance procedures for PVC pipes are specified in WSA 02 Sewerage Code of Australia and additional information is also available on the WSAA web site.

The following standards and guideline also provide information:

- AS/NZS 2032:2006 *Installation of PVC pipe systems*
- AS/NZS 2566.1:1998 *Buried flexible pipelines Part 1: Structural Design*
- AS/NZS 2566.2:2002 *Buried flexible pipelines Part 2: Installation*
- POP102 *Solvent Cement Jointing of PVC Pipe*

There is a need for installers and repairers to be trained in the installation/repair of PVC pipe systems. ERA does not provide any specific training for pipe layers, however there are a number of Registered Training Organisations (RTO's) who conduct suitable training courses based on AS/NZS 2032 and AS/NZS 2566.2.

The Plastics Industry Pipe Association of Australia Limited (PIPA) have nominated the Flexitec course, which covers PVC pipe handling and installation, and is delivered nationally either directly by LeHunt and Associates or in conjunction with PARTEC (QLD, NT, NSW), Holmesglen TAFE (VIC) and Regency TAFE (SA). The Civil Contractor's Federation have their own state-based RTO's and some of them also conduct suitable PVC pipe training courses.

8 PRODUCT MARKING

ERA PVC-U injection moulded fittings are marked in accordance with AS/NZS 1260:2017 including the following:

- Manufacturer's name or trademark: ERA
- Nominal size: e.g. 150mm
- Material: UPVC
- The angle of the fitting: e.g. 45°
- The letters 'DWV'
- Stiffness class for pipe: e.g., SN8
- Date of manufacture: dial indicator
- The number of this Standard: AS/NZS 1260
- the letters 'BEP PVC'.
- StandardsMark Licence No: SMK 26022

See Figure 1 for an example of marking.



FIGURE 1 EXAMPLE OF MARKING

9 PACKAGING AND TRANSPORTATION

ERA PVC-U moulded fittings are stored and transported in individual cartons or in cartons on pallets. The pallets are then covered with a shrink wrap. This method of transporting the fittings ensures no scoring to the body of the fitting or damage to any sealing surfaces.

All fittings are stored under cover in dry conditions with all moulded fittings kept in their packaging.

10 PRODUCT WARRANTY

The products are covered by the normal commercial and legal requirements of the *Competition and Consumer Act 2010 (Cth)*, which covers manufacture to the relevant standard and details of the distributors warranty is included in their terms and conditions of sale.

11 OUTCOMES OF EXPERT PANEL PRODUCT REVIEW

No issues were raised.

12 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD-TESTING REPORT

PVC gravity sewer systems have been in use in Australia since the early 1970s and are the predominant option for collection sewers in sizes up to DN 375. Water industry consensus is that PVC-U gravity systems have performed satisfactorily and that correctly installed PVC-U systems have better resistance to tree root penetration, whether elastomeric sealing ring jointed or solvent cement jointed. However, some mechanical failures of moulded fittings have been experienced when utilised in sewer property service connection assemblies.

WSAA has included an option within WSA PS 230 to allow the specification of DN 100 and DN 150 heavy duty fittings with increased wall thicknesses for property service applications where additional mechanical resistance may be required to resist ground movements, subsidence or settlement related issues. Refer to WSA PS 230 for details.

PVC-U systems should not be used where the ground is or may be contaminated by chemicals, especially organic solvents.

13 FUTURE WORKS

There are no future work items.

14 DISCLAIMER

This Product Appraisal Report (Report) is issued by the Water Services Association of Australia Limited on the understanding that:

This Report applies to the product(s) as submitted. Any changes to the product(s) either minor or major shall void this Report.

To maintain the recommendations of this Report any such changes shall be detailed and notified to the Product Appraisal Manager for consideration and review of the Report and appropriate action. Appraisals and their recommendations will be the subject of continuous review dependent upon the satisfactory performance of products.

WSAA reserves the right to undertake random audits of product manufacture and installation. Where products fail to maintain appraised performance requirements the appraisal and its recommendations may be modified and reissued. Appraisal reports will be reviewed and reissued at regular intervals not exceeding five (5) years.

The following information explains a number of very important limits on your ability to rely on the information in this Report. Please read it carefully and take it into account when considering the contents of this Report.

Any enquiries regarding this report should be directed to the Program Manager, Carl Radford, Phone: 03 8605 7601 email carl.radford@wsaa.asn.au.

14.1 Issue of Report

This Report has been published and/or prepared by the Water Services Association of Australia Limited and nominated Project Manager and peer group of technical specialists (the Publishers).

The Report has been prepared for use within Australia only by technical specialists that have expertise in the function of products such as those appraised in the Report (the Recipients).

By accepting this Report, the Recipient acknowledges and represents to the Publisher(s) and each person involved in the preparation of the Report that the Recipient has understood and accepted the terms of this Disclaimer.

14.2 Limits on Reliance on Information and Recommendations

14.2.1 Disclaimer of liability

Neither the Publisher(s) nor any person involved in the preparation of the Report accept(s) any liability for any loss or damage suffered by any person however caused (including negligence or the omission by any person to do anything) relating in any way to the Report or the product appraisal criteria underlying it. This includes (without limitation) any liability for any recommendation or information in the Report or any errors or omissions.

14.2.2 Need for independent assessment

The information and any recommendation contained (expressly or by implication) in this Report are provided in good faith. However, you should treat the information as indicative only. You should not rely on that information or any such recommendation except to the extent that you reach an agreement to the contrary with the Publisher(s).

This Report does not contain all information that a person might require for the purposes of assessing any product discussed or appraised within it (Product). The product appraisal criteria used in preparing this Report may not address all relevant aspects of the Product.

Recipients should seek independent evidence of any matter which is material to their decisions in connection with an assessment of the Product and consult their own advisers for any technical information required. Any decision to use the Product should take into account the reliability of that independent evidence obtained by the Recipient regarding the Product.

Recipients should also independently verify and assess the appropriateness of any recommendation in the Report, especially given that any recommendation will not take into account a Recipient's particular needs or circumstances.

WSAA has not evaluated the extent of the product liability and professional indemnity insurance that the provider of the product maintains. Recipients should ensure that they evaluate the allocation of liability for product defects and any professional advice obtained in relation to the product or its specification including the requirements for product liability and professional indemnity insurance.

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The Publisher(s) do[es] not, in any way, warrant that steps have been taken to verify or audit the accuracy or completeness of the information in this Report, or the accuracy, completeness or reasonableness of any recommendation in this Report.

APPENDIX A – PRODUCT LITERATURE



AS/NZS1260 PVC DWV FITTINGS

PIPES

Size Nom	Outer Dia	Wall Thickness	Pressure
40	40	2.00	SN6
50	50	2.30	SN6
65	65	2.70	SN6
80	80	2.90	SN6
100	100	2.50	SN4
100	100	3.00	SN6
150	150	4.00	SN4
150	150	5.00	SN8

45° JUNCTION F/I/F

Work Size	D	d	L1	L2	L3
30	40.6	30.8	24.5	71	105
40	47.6	43.4	44.5	81.6	126
50	61.1	54.3	30.5	101.5	146
65	74.6	68.4	38.5	124.2	180
80	88.8	83.2	44.5	149	217.6
100	116.7	110.9	50.5	188	268

45° JUNCTION THREAD M/F

Nom Size	D	d	D1	d1	Tr	L1	L2	H
100	119	110.9	110	103.8	125	50.5	193	270

45° JUNCTION F/I/F

Nom Size	D	d	D1	Tr	L1	L2	H
100	119	110.9	116.7	125	50.5	188	264

45° SIDE ACCESS JUNCTION LEFT F/I/F

Nom Size	D	d	D1	Tr	L1	L2	L3	L4	H
100	119	110.9	116.7	125	50.5	156	190	156	287.5

45° SIDE ACCESS JUNCTION RIGHT F/I/F

Nom Size	D	d	D1	Tr	L1	L2	L3	L4	H
100	119	110.9	116.7	125	50.5	134	188	134	268

INSPECTION TEST OPENING F/I/F

Nom Size	D	d	Tr	L1	L2	H
100	116.7	110.9	125	50.5	110	220

INSPECTION TEST OPENING M/F

Nom Size	D	d	Tr	L1	L2	L3	D1	d1
100	119	110.9	125	50.5	110	225	110	103.8

88° PLAIN JUNCTION F/I/F

Nom Size	D	d	Tr	L1	L2	L3	L4	D1
100	119	110.9	125	50.5	106	130	239	114.7

PVC DWV FITTINGS

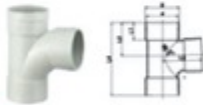
AS/NZS1260



ITEM NO: AUDE07

88° SIDE ACCESS JUNCTION F/F

Nom Size	D	d	Tr	L1	L2	L	H
100	116.7	110.9	125	102.8	154.5	50.5	250.3



ITEM NO: AUDE01

88° JUNCTION F/F

Nom Size	D	d	L1	L2	L3	L4
32	40.8	30.8	24.5	48	48	96
40	47.8	43.4	27.5	50	60	110
50	61.1	56.3	30.5	60	71	131
65	74.6	69.4	38.5	73	99	172
80	88.8	83.2	44.5	84.5	116.5	201
100	116.7	110.9	50.5	102.8	154.5	250.3



ITEM NO: AUDE04

88° BEND SIDE ACCESS F/F

Nom Size	D	d	L	I	L1
100	116.7	110.9	130	50.5	108.52



ITEM NO: AUDE02

88° BEND SIDE ACCESS F/F

Nom Size	D	d	d1	L	M
40	47.8	43.4	25	27.5	33
50	61.1	56.3	37	30.5	45
65	74.6	69.4	36.6	38.5	45
100	116.7	110.9	112	50.5	125



ITEM NO: AUDE01

88° BEND F/F

Nom Size	D	d	L	I
32	40.8	36.8	48	24.5
40	47.8	43.4	60	27.5
50	61.1	56.3	71	30.5
65	74.6	69.4	99	38.5
80	88.8	83.2	103	44.5
100	116.7	110.9	130	50.5
150	172.5	160.9	225.3	77



ITEM NO: AUDE10

88° BEND M/F

Nom Size	D	d	L1	L2	L3	D1	d1
40	47.8	43.4	27.5	52	52	43	38.2
50	61.1	56.3	30.5	62	64	56	51
65	74.6	69.4	38.5	88	97	69	63.6
100	116.7	110.9	50.5	130	132	110	103.8



ITEM NO: AUDE05

45° BEND SIDE ACCESS F/F

Nom Size	D	d	L	I	L1
100	116.7	110.9	110	50.5	108.26



ITEM NO: AUDE03

45° BEND F/F

Nom Size	D	d	L	h
32	40.8	36.8	24.5	33.3
40	47.8	43.4	27.5	39
50	61.1	56.3	30.5	45
65	74.6	69.4	38.5	56
80	88.8	83.2	44.5	65
100	116.7	110.9	50.5	77
150	168.5	160.9	77	136



AS/NZS1260

PVC DWV FITTINGS



ITEM NO: AUDE06

45° BEND M/F

Nom Size	D	d	L1	L2	L3	D1	d1
40	47.8	43.4	27.5	43	39	43	38.2
50	61.1	56.3	30.5	49	45	56	51
65	74.6	69.4	38.5	60	56	69	63.6
80	88.8	83.2	44.5	70	65	82.5	76.5
100	116.7	110.9	50.5	82	82	110	103.8



ITEM NO: AUDE021

42° BEND M/F

Nom Size	D	d	L1	L2	L3	D1	d1
100	116.7	110.9	50.5	82	82	110	103.8



ITEM NO: AUDE01

SOCKET REDUCER

Nom Size	D1	D2	d	L	H
50X40	56	51	43.4	27.5	30.5
65X40	69	63.6	43.4	27.5	41.5
65X50	69	63.6	56.3	30.5	41.5
80X50	82.5	76.5	56.3	30.5	47
80X65	82.5	76.5	69.4	38.5	47
100X40	110	103.8	43.4	27.5	53.5
100X65	110	103.8	69.4	38.5	53.5
100X50	110	103.8	56.3	30.5	53.5
50X40	57.5	50.45	43.4	32	38.3
100X80	111	101.7	83.2	53.8	78.2



ITEM NO: AUDE01

ACCESS COUPLING

Nom Size	D	Tr	d	L	H
100	116.7	125	110.9	50.5	105
150	168.5	174	160.9	77	159.2



ITEM NO: AUDE034

FOUR WAY RISER

Nom Size	D	d	L	L1	H	D1	d1	D2
100X40X40X40	116.7	110.9	50.5	27.5	175	47.8	43.4	110
100X50X40X40	116.7	110.9	50.5	30.5	193.5	61.1	56.3	110
80X40X40X40	88.8	83.2	45.34	27.5	162	47.8	43.4	82.5



ITEM NO: AUDE02

COUPLING F/F

Nom Size	D	d	L	H
32	40.8	36.8	24.5	51.5
40	48.2	43.4	27.5	57
50	61.1	56.3	30.5	63
80	88.8	83.2	44.5	91
100	116.7	110.9	50.5	104



ITEM NO: AUDE02

LEVEL INVERT TAPER M/F

Nom Size	D	d	I	L	H	D1	d1
50X40	56	51	27.5	29.44	66	48.4	43.4
65X40	69	63.6	27.5	37.57	93	48.4	43.4
65X50	69	63.6	30.5	37.57	79	61.7	56.3
80X50	82.5	76.5	30.5	44.63	108	61.1	56.3
80X65	82.5	76.5	38.5	44.24	125	75.1	69.4
100X65	110	103.8	38.5	49.18	124	74.9	69.4
100X50	110	103.8	30.5	48.88	115.7	61.1	56.3
100X80	110	103.8	44.5	49.62	130	88.8	83.2
150X100	160	151.8	50.5	98.3	210	118.5	110.9

PVC DWV FITTINGS

AS/NZS1260



ITEM NO: AUDW01

DUST CAP

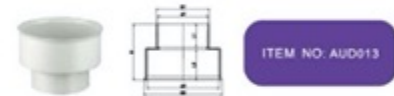
Nom Size	D	d	H
40	47.8	43.4	27.4
50	61.1	56.3	27.5
65	74.6	69.4	27.7
80	88.8	83.2	28
100	116.7	110.9	28.1
150	169.1	160.9	39.3



ITEM NO: AUDS01

FLOOR WASTE GULLY

Nom Size	D	d	H	D1	d1
80X50	88.8	69.4	30.5	61.06	56.3
80X65	88.8	69.4	38.5	74.6	69.4
100X50	110.9	69.4	30.5	61.06	56.3
100X65	116.7	69.4	38.5	74.6	69.4
100X100	116.7	110.9	50.5	115	100



ITEM NO: AUD013

CERAMIC ADAPTOR

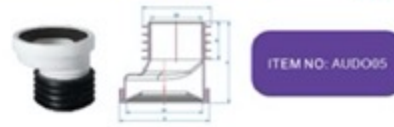
Nom Size	D1	d1	L1	L2	H	D2	d2
100	116.7	110.9	50.5	67	123	172.5	158.5



ITEM NO: AUDD03

PAN CONNECTORS 60MM OFFSET

Size Nom	D	D1	D2	D3	H	L	Z
100	147	126	112.7	83.8	61.7	74.8	60



ITEM NO: AUDD05

PAN CONNECTORS 20MM OFFSET

Size Nom	D	D1	D2	D3	H	L	Z
100	147	126	112.7	83.8	61.7	133.3	20



ITEM NO: AUDD01

FINISHING COLLAR AND GRATE

Nom Size	D1	d1	L1	L2	H	D2	d2
100	116.7	110.9	50.5	17	70	149.6	143.2



ITEM NO: AUD023

ADAPTOR FEMALE IRON

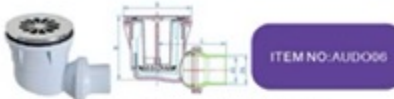
Nom Size	D	D1	Rc	d	H	L
40	53	43	G1 1/2	38.2	52.5	28
50	65	56	2"	51	59	31



ITEM NO: AUD030

CONNECTOR FEMALE IRON

Nom Size	D	D1	Rc	d	H	L
40	53	47.8	1 1/2	43.4	50	27.5
50	65	61.1	2	56.3	59	30.5



ITEM NO: AUDD06

EASY CLEAN SHOWER WASTE

Size Nom	D1	d1	D	H	L
50	50	43.4	114.2	107.15	114.9



AS/NZS1260

PVC DWV FITTINGS



ITEM NO: AUD024

CONNECTOR MALE IRON

Nom Size	D	L	H	R
40	38.2	22.5	55	1 1/2
50	51	24	62	2



ITEM NO: AUD07

VENT COWL

Nom Size	D	d	d1	L	H
50	62	56.3	32.05	25.2	65



ITEM NO: AUDI03

INSPECTION TEST OPENING WITH ONE SOCKET THREAD F/F

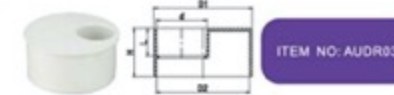
Nom Size	D	d	Tr	L1	L2	L3	D1
100	116.7	110.9	125	50.5	110	220	119



ITEM NO: AUDT09

88' JUNCTION M/F

Nom Size	D	d	L1	L2	L3	L4	d1	D1
100	116.7	110.9	50.5	102.8	154.5	250.3	103.8	110



ITEM NO: AUDR03

PIPE REDUCER M/F

Nom Size	D1	D2	d	L	H
40X32	43.1	37.6	36.8	24.5	30.5
50X40	57.5	43.4	38.3	32	32
100X40	110	103.8	43.4	27.5	53.5
100X50	110	103.8	56.3	30.5	53.5
100X80	111	83.2	78.2	48.3	53.8



ITEM NO: AUDT010

JUNCTION THREAD F/F

Nom Size	D	d	D1	H	Tr	L1	L2
100	119.6	110.9	116.7	270	124.2	50.5	193



ITEM NO: AUDF02

FLANGE

Nom Size	D	d	D1	H	H1
100	116.5	110.9	169.5	67.5	51



ITEM NO: AUDD02

DIAMOND FLOOR DRAIN

Nom Size	D	d	D1	H	L
100	117.5	91.5	97	64.5	104.5

PVC DWV FITTINGS

AS/NZS1260



ITEM NO: AUDD03

● ROUND FLOOR DRAIN

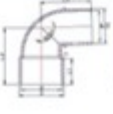
Nom Size	D	d	D1	H	L
100	117.5	91.5	97	64.5	104.5



ITEM NO: AUDD04

● SQUARE FLOOR DRAIN

Nom Size	D	d	D1	H	L
100	117.5	91.5	97	64.5	104.5



ITEM NO: AUDE07

● 90° BEND M/F

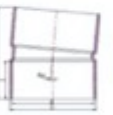
Nom Size	D	d	L1	L2	L3	D1	d1
40	47.8	43.4	27.5	40.08	54	37.8	33.5
50	61.1	56.3	30.5	48.27	64	50.2	44.2



ITEM NO: AUDE08

● 45° REDUCING BEND

Nom Size	D	d	L1	L2	L3	L4	D1	d1
50X40	56	51.65	29.5	42.17	27.5	40.59	47.8	43.4



ITEM NO: AUDE09

● 5° BEND

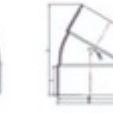
Nom Size	D	d	L	I
100	116.7	110.9	123.66	50.5



ITEM NO: AUDE011

● 15° BEND

Nom Size	D	d	L	I
100	116.7	110.9	140.90	50.5



ITEM NO: AUDE012

● 30° BEND

Nom Size	D	d	L	I
100	116.7	110.9	157.93	50.5



ITEM NO: AUDE013

● 15° BEND M/F

Nom Size	D	d	L1	L2	L3	D1	d1
100	116.7	110.9	50.5	62.4	65.76	110	103.8



ITEM NO: AUD025

● ADAPTOR MALE IRON

Nom Size	D	d1	d2	R	L1	L2	H
40	47.8	43.4	38.2	1 1/2"	22.5	27.5	55
50	61.1	56.3	38.2	2"	24	27.5	59



ITEM NO: AUDE014

● 22° BEND M/F

Nom Size	D	d	L1	L2	L3	D1	d1
100	116.7	110.9	50.5	66	69.43	110	103.8



AS/NZS1260

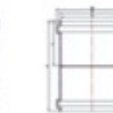
PVC DWV FITTINGS



ITEM NO: AUDE015

● 11° BEND M/F

Nom Size	D	d	L1	L2	L3	D1	d1
100	116.7	110.9	50.5	60	64.24	110	103.8



ITEM NO: AUDC03

● COUPLING WITH RUBBER

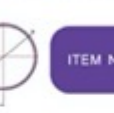
Nom Size	D	d	L	H	D1
100	117.3	111	78.9	160	127.4
150	169.2	161	116.5	236	181.8



ITEM NO: AUDR04

● REDUCING COUPLING M/F

Nom Size	D	d	D1	d1	H	L
100	102.7	96.5	116.7	110.9	130	50.5



ITEM NO: AUDP01

● KEY CLIP

Nom Size	L	D	d	D1	d1	H	R
40	54		14.35		14.35	9.4	48.9
100	136.3	53.3	23.3	56.3	26.3	12	116.9



ITEM NO: AUDP02

● PLAS CLIP O

Nom Size	D	L	L1	H	R	R1
32	19.4	3.2	59.2	80.5	42.6	36.2



ITEM NO: AUDP03

● PIPE CLIP

Nom Size	D	H	L	R
100	43.5	175.65	113.65	109.5



ITEM NO: AUDP04

● PIPE CLIP SADDLE

Nom Size	D	D1	D2	H	L	L1	R
40	81	62.3	12.6	54.5	4	30.75	42.5



ITEM NO: AUDD01

● OFF SET PAN COLLAR 20'

Nom Size	D	D1	L	H	F
100	155	102.69	68	120.7	8.3



ITEM NO: AUDD02

● OFF SET PAN COLLAR

Nom Size	D	D1	L	H
100	155	102.69	52	100.2



ITEM NO: AUDW04

● COVER PLANLE

Nom Size	D	d	D1	L	L1
100	117.2	111	160.5	22	3.1

PVC DWV FITTINGS AS/NZS1260



LONG COUPLING
ITEM NO: AUDC04

Nom Size	D	d	D1	d1	H	L
100	102.7	96.5	116.7	110.9	175	50.5

TILE LEAK CONTROL FLANGE
ITEM NO: AUDF03

Nom Size	D	d	D1	H	H1
80	196	69.3	75.2	48.4	60.8
100	219	96.4	102.7	66	53.7

SLIP COUPLING
ITEM NO: AUDC07

Nom Size	D	d	d1	L
100	117	111.1	110.8	125

45° JUNCTION
ITEM NO: AUDT013

Nom Size	D	d	Tr	H	L	L1	L2
150	168.5	160.9	174.5	412	77	130.54	281.32

THREADED CAP
ITEM NO: AUDW03

Nom Size	D	H	H1	Tr
100	182.5	34.5	30	175.5
150	169.1	39.3		160.9

88° PLAIN JUNCTION M/F
ITEM NO: AUDT014

Nom Size	D	d	Tr	H	L	L1	L2	L3
100X88	119.6	110.9	124.2	80.5	106	130	239	110

REDUCING TEE
ITEM NO: AUDT011

Nom Size	D	d	D1	d1	L1	L2	L3	L4	Tr
150X100	168.5	160.9	120	110.9	77	90.5	228.22	328	124

88° JUNCTION
ITEM NO: AUDT012

Nom Size	D	d	Tr	H	L	L1	L2
150	168.5	160.9	174.5	355	77	197	200

88° JUNCTION
ITEM NO: AUDT015

Nom Size	D	d	D1	d1	L1	L2	L3	L4
100X50	61.1	56.3	116.7	110.9	180	50.5	97.42	30.5

45° JUNCTION
ITEM NO: AUDT016

Nom Size	D	d	D1	d1	L1	L2	L3	L4
100X50	61.1	56.3	116.7	110.9	190	50.5	139.1	30.5

PVC DWV FITTINGS AS/NZS1260



60° BEND F/F
ITEM NO: AUDE016

Nom Size	D	d	L1	L2	H1	H2
100	116.7	110.9	50.5	68.21	100.23	85.47

DWV PVC BEND M&F PLAIN
ITEM NO: AUDE020

Size Nom	D	d	L1	L2	L3	D1	d1
100	116.7	110.9	50.5	116	104.2	102.7	96.5

11° BEND F/F
ITEM NO: AUDE017

Nom Size	D	d	L	H
100	116.7	110.9	50.5	81

COUPLING DWV FLANGED PRE-LAY
ITEM NO: AUDC05

Size Nom	D	D1	D2	D3	d	d1	L	L1	L2
80	143.38	110.9	109.2	82	63.2	68.8	35.78	44.5	134

30° BEND M/F
ITEM NO: AUDE018

Nom Size	D	d1	d2	L1	L2	H1	H2
100	116.7	110.9	110	103.8	50.5	75.06	70.29

SNAP TEE
ITEM NO: AUDT017

Size Nom	D	D1	D2	D3	H	L	L1
100	162	110.9	116.7	124.2	20.5	50.5	182.7

PAN CONNECTORS 0MM OFFSET
ITEM NO: AUDD04

Size Nom	D	D1	D2	D3	H	L
100	147.9	126	112.7	83.8	61.7	133.3

22° BEND F/F
ITEM NO: AUDE019

Nom Size	D	d	L	H
100	116.7	110.9	50.5	66

Puddle Flange
ITEM NO: AUFD04

Size Nom	D	D1	D2	H	L
50	200.4	101.8	50	31.25	74.8

VENT PIPE
ITEM NO: AUDC06

Size Nom	D	D1	D2	H	L	L1
50=40	61.1	56.3	43.4	30	31.5	76.2

APPENDIX B - QUALITY CERTIFICATIONS

Copies of the following Quality Certificates are available from WSAA.

**TABLE B1
ERA PIPING (ZHEJIANG) CO LTD - MANAGEMENT SYSTEMS**

1118 Huangjiao Road Huangyan Economic Development Zone Taizhou Zhejiang China	
Quality Systems Standard	ISO 9001:2015
Certification Licence No.	ZRC22Q0196R0S
Certifying Agency	Guangdong Zhongren Lianhe Certification Co Ltd
First Date of Certification	-
Current Date of Certification	12 July 2022
Expiry Date of Certification	11 July 2025

**TABLE B2
ERA PIPING (ZHEJIANG) CO LTD - PRODUCT CERTIFICATION**

1118 Huangjiao Road Huangyan Economic Development Zone Taizhou Zhejiang China	
Product Standard/Spec.	AS/NZS 1260:2017
Certificate No.	SMK26022
Issuing Certification Body	SAI Global
First Date of Certification	12 June 2020
Current Date of Certification	5 June 2023
Expiry Date of Certification	11 June 2025

**TABLE B3
ERA PIPING (ZHEJIANG) CO LTD – BEST ENVIRONMENTAL PRACTICE PVC**

1118 Huangjiao Road Huangyan Economic Development Zone Taizhou Zhejiang China	
Product Standard/Spec.	AS/NZS 1260:2017
Certificate No.	BEP-AMI 78010
Issuing Certification Body	ApprovalMark International
First Date of Certification	28 August 2017
Current Date of Certification	5 May 2022
Expiry Date of Certification	28 August 2023



Quality Management System Certificate

Certificate No : ZRC22Q0196R0S

We hereby certify that the organization
ERA PIPING (ZHEJIANG) CO.,LTD.

Unified social credit code : 91331003MA7J3CBB63

Registration Add:NO.1118 HUANGJIAO ROAD, HUANGYAN JIANGKOU STREET,
 TAIZHOU,ZHEJIANG PROVINCE

Audit Add:NO.1118 HUANGJIAO ROAD, HUANGYAN JIANGKOU STREET,
 TAIZHOU,ZHEJIANG PROVINCE

Is in conformity with Quality Management System Standard
GB/T 19001—2016 / ISO 9001:2015

The certificate is valid to the following product(s)/service :
PLASTIC PIPING SYSTEM DESIGN AND MANUFACTURING

Date of Issue : 2022-07-12

Date of Expiry : 2025-07-11

The Effectiveness of the Certificate is Subject to QR Code in the Right.
 Meanwhile, You Can Search the CNCA Website : www.cnca.gov.cn
 Website of Certification Body:www.zrlhrz.com



Guangdong Zhongren Lianhe Certification CO.,Ltd
 Address:The 2305th of building 4,Science and Technology
 Innovation Center, Chaogui South Road 1,Ronggui Town,
 Shunde District ,Foshan City. Postcode:528315
 Telephone:0757-22191198





STANDARDSMARK LICENCE

SAI Global hereby grants:

ERA PIPING (ZHEJIANG) CO., LTD.

No.1118 Huangjiao Road, Huangyan Economic Development Zone, Taizhou, Zhejiang China

StandardsMark Licence

Manufactured to:

AS/NZS 1260:2017 - PVC-U pipes and fittings for drain, waste and vent applications

"the StandardsMark Licensee" the right to use the STANDARDSMARK as shown below only in respect of the goods described and detailed in the Schedule which are produced by the Licensee or on behalf of the Licensee* and which comply with the appropriate Standard referred to above as from time to time amended. The Licence is granted subject to the rules governing the use of the STANDARDSMARK and the Terms and Conditions for certification and licence. The Licensee covenants to comply with all the Rules and Terms and Conditions.

Licence No: SMK26022

Issued : 5 June 2023
Expires : 11 June 2025

Originally Certified : 12 June 2020
Current Certification : 5 June 2023

Calin Moldovean
President, Business Assurance
SAI Global Assurance



* For details of manufacture, refer to the licensee

The STANDARDSMARK is a registered certification trademark of SAI Global Pty Limited (A.C.N. 050 644 642) and is issued under licence by SAI Global Certification Services Pty Limited (ACN 108 716 669) ("SAI Global") 650 Lorimer Street, Port Melbourne VIC 3207, GPO Box 5420 Sydney NSW 2001. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. Refer to www.saiglobal.com, for the list of product models.



SCHEDULE TO STANDARDSMARK LICENCE

SAI Global hereby grants:

ERA PIPING (ZHEJIANG) CO., LTD.

No.1118 Huangjiao Road, Huangyan Economic Development Zone, Taizhou, Zhejiang China

StandardsMark Licence

Manufactured to:

AS/NZS 1260:2017 - PVC-U pipes and fittings for drain, waste and vent applications

Model identification of the goods on which the STANDARDSMARK may be used:

Model Identification	Model Name	Brand Name	Product Description	Product Type	Nominal Size (DN)	Stiffness Classification	Joint Type	Colour	Date Endorsed
ASC006 100	GULLY DISH & LID	ERA	GULLY DISH & LID	GULLY DISH & LID	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD001 DN100-SH4	DN100 PVC Pipes for Drainage	ERA	DN100 PVC Pipes for Drainage	PVC Pipes for Drainage	DN 100	SN4	Solvent cement	Light Grey	30 May 2023
AUD001 DN100-SN6	DN100 PVC Pipes for Drainage	ERA	DN100 PVC Pipes for Drainage	PVC Pipes for Drainage	DN 100	SN6	Solvent cement	Light Grey	30 May 2023
AUD001 DN150-SH4	DN150 PVC Pipes for Drainage	ERA	DN150 PVC Pipes for Drainage	PVC Pipes for Drainage	DN 150	SN4	Solvent cement	Light Grey	30 May 2023
AUD001 DN150-SH8	DN150 PVC Pipes for Drainage	ERA	DN150 PVC Pipes for Drainage	PVC Pipes for Drainage	DN 150	SN8	Solvent cement	Light Grey	30 May 2023
AUD001 DN32	DN32 PVC Pipes for Drainage	ERA	DN32 PVC Pipes for Drainage	PVC Pipes for Drainage	DN 32	SN6	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD001 DN40	DN40 PVC Pipes for Drainage	ERA	DN40 PVC Pipes for Drainage	PVC Pipes for Drainage	DN 40	SN6	Solvent cement	Light Grey	30 May 2023
AUD001 DN50	DN50 PVC Pipes for Drainage	ERA	DN50 PVC Pipes for Drainage	PVC Pipes for Drainage	DN 50	SN6	Solvent cement	Light Grey	30 May 2023
AUD001 DN65	DN65 PVC Pipes for Drainage	ERA	DN65 PVC Pipes for Drainage	PVC Pipes for Drainage	DN 65	SN6	Solvent cement	Light Grey	30 May 2023
AUD001 DN80	DN80 PVC Pipes for Drainage	ERA	DN80 PVC Pipes for Drainage	PVC Pipes for Drainage	DN 80	SN6	Solvent cement	Light Grey	30 May 2023
AUD001S DN100-SN6	DN100 PVC Sandwich Pipes for Drainage	ERA	DN100 PVC Sandwich Pipes for Drainage	PVC Sandwich Pipes for Drainage	DN 100	SN6	Solvent cement	Light Grey	30 May 2023
AUD013 100	100 SPIGGOT ADAPTOR	ERA	100 SPIGGOT ADAPTOR	SPIGGOT ADAPTOR	DN 100	SN6	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD023 40	40 IRON ADAPTOR FEMALE	ERA	40 IRON ADAPTOR FEMALE	IRON ADAPTOR FEMALE	DN 40	SN8	Solvent cement-Spigt and	Light Grey	30 May 2023
AUD023 50	50 IRON ADAPTOR FEMALE	ERA	50 IRON ADAPTOR FEMALE	IRON ADAPTOR FEMALE	DN 50	SN6	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD024 40	40 IRON ADAPTOR MALE	ERA	40 IRON ADAPTOR MALE	IRON ADAPTOR MALE	DN 40	SN6	Solvent cement-Spigt and	Light Grey	30 May 2023
AUD024 50	50 IRON ADAPTOR MALE	ERA	50 IRON ADAPTOR MALE	IRON ADAPTOR MALE	DN 50	SN6	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD025 40	40 IRON CONNECTOR MALE	ERA	40 IRON CONNECTOR MALE	IRON CONNECTOR MALE	DN 40	SN6	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD025 50	50 IRON CONNECTOR MALE	ERA	50 IRON CONNECTOR MALE	IRON CONNECTOR MALE	DN 50	SN6	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD030 40	40 IRON CONNECTOR FEMALE	ERA	40 IRON CONNECTOR FEMALE	IRON CONNECTOR FEMALE	DN 40	SN6	Solvent cement-tapered socket	Light Grey	30 May 2023

Licence No: SMK26022

Issued Date: 5 June 2023

This schedule supersedes all previously issued schedules



* For details of manufacture, refer to the licensee

The STANDARDSMARK is a registered certification trademark of SAI Global Pty Limited (A.C.N. 050 644 642) and is issued under licence by SAI Global Certification Services Pty Limited (ACN 108 716 669) ("SAI Global") 650 Lorimer Street, Port Melbourne VIC 3207, GPO Box 5420 Sydney NSW 2001. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. Refer to the Schedule for the list of product models.

SCHEDULE TO STANDARDSMARK LICENCE

Model Identification	Model Name	Brand Name	Product Description	Product Type	Nominal Size (DN)	Stiffness Classification	Joint Type	Colour	Date Endorsed
AUD030 50	50 IRON CONNECTOR FEMALE	ERA	50 IRON CONNECTOR FEMALE	IRON CONNECTOR FEMALE	DN 50	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD034 100/50/50/40/40	100/50/50/40/40 FOUR WAY RISER	ERA	100/50/50/40/40 FOUR WAY RISER	FOUR WAY RISER	DN 100/50/50/40/40	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD034 100/50/50/50/40	100/50/50/50/40 FOUR WAY RISER	ERA	100/50/50/50/40 FOUR WAY RISER	FOUR WAY RISER	DN 100/50/50/50/40	SN8	Solvent cement	Light grey	30 May 2023
AUD034 80/50/40/40/40	80/50/40/40/40 FOUR WAY RISER	ERA	80/50/40/40/40 FOUR WAY RISER	FOUR WAY RISER	DN 80/50/40/40/40	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD07 100	VENT COWL	ERA	VENT COWL	VENT COWL	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD07 50	50 VENT COWL	ERA	50 VENT COWL	VENT COWL	DN 50	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD001 100	100 ACCESS COUPLING	ERA	100 ACCESS COUPLING	ACCESS COUPLING	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD001 150	150 ACCESS COUPLING	ERA	150 ACCESS COUPLING	COUPLING FOR THREADED CAP	DN 150	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD002 100	100 COUPLING F/F	ERA	100 COUPLING F/F	COUPLING	DN 100	SN8	Solvent cement	Light grey	30 May 2023
AUD002 150	150 COUPLING F/F	ERA	150 COUPLING F/F	COUPLING	DN 150	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD002 32	32 COUPLING F/F	ERA	32 COUPLING F/F	COUPLING	DN 32	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD002 40	40 COUPLING F/F	ERA	40 COUPLING F/F	COUPLING	DN 40	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD002 50	50 COUPLING F/F	ERA	50 COUPLING F/F	COUPLING	DN 50	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD002 65	65 COUPLING F/F	ERA	65 COUPLING F/F	COUPLING	DN 65	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD002 80	80 COUPLING F/F	ERA	80 COUPLING F/F	COUPLING	DN 80	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD003 100	100 Coupling with rubber	ERA	100 Coupling with rubber	SLIP COUPLING	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD003 150	150 Coupling with rubber	ERA	150 Coupling with rubber	SLIP COUPLING	DN 150	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD004	100 Long Coupling	ERA	100 Long Coupling	EXPANSION COUPLING	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD005 80	COUPLING DWV FLANGED PRE-LAY	ERA	COUPLING DWV FLANGED PRE-LAY	COUPLING DWV FLANGED PRE-LAY	DN 80	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD001 100	100 FINISHING COLLAR AND GRATE	ERA	100 FINISHING COLLAR AND GRATE	FINISHING COLLAR AND GRATE	DN 150/100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD002	100 Diamond Floor Drain	ERA	100 Diamond Floor Drain	FLOOR DRAIN	DN 100	SN8	Solvent cement-Spout end	Light Grey	30 May 2023
AUD003	100 Round Floor Drain	ERA	100 Round Floor Drain	FLOOR DRAIN	DN 100	SN8	Solvent cement-Spout end	Light Grey	30 May 2023
AUD004	100 Square Floor Drain	ERA	100 Square Floor Drain	FLOOR DRAIN	DN 100	SN8	Solvent cement-Spout end	Light Grey	30 May 2023

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SCHEDULE TO STANDARDSMARK LICENCE

Model Identification	Model Name	Brand Name	Product Description	Product Type	Nominal Size (DN)	Stiffness Classification	Joint Type	Colour	Date Endorsed
AUDE01 100	100 88°BEND F/F	ERA	100 88°BEND F/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE01 150	150 88°BEND F/F	ERA	150 88°BEND F/F	BEND	DN 150	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE01 32	88° BEND F/F	ERA	88° BEND F/F	88° BEND	DN 32	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE01 40	40 88°BEND F/F	ERA	40 88°BEND F/F	BEND	DN 40	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE01 50	50 88°BEND F/F	ERA	50 88°BEND F/F	BEND	DN 50	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE01 65	65 88°BEND F/F	ERA	65 88°BEND F/F	BEND	DN 65	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE01 80	80 88°BEND F/F	ERA	80 88°BEND F/F	BEND	DN 80	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE010 100	100 88°BEND M/F	ERA	100 88°BEND M/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE010 40	40 88°BEND M/F	ERA	40 88°BEND M/F	BEND	DN 40	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE010 50	50 88°BEND M/F	ERA	50 88°BEND M/F	BEND	DN 50	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE010 65	65 88°BEND M/F	ERA	65 88°BEND M/F	BEND	DN 65	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE011	100 15° BEND F/F	ERA	100 15° BEND F/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE012	100 30° BEND F/F	ERA	100 30° BEND F/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE013	100 15° BEND M/F	ERA	100 15° BEND M/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE014	100 22° BEND M/F	ERA	100 22° BEND M/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE015	100 11° BEND M/F	ERA	100 11° BEND M/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE016 100	60° BEND F/F	ERA	60° BEND F/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE017 100	11° BEND F/F	ERA	11° BEND F/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE018 100	30° BEND M/F	ERA	30° BEND M/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE019 100	22° BEND F/F	ERA	22° BEND F/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE02 100	100 88°BEND SIDE ACCESS F/F	ERA	100 88°BEND SIDE ACCESS F/F	BEND SIDE ACCESS	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE02 40	40 88°BEND SIDE ACCESS F/F	ERA	40 88°BEND SIDE ACCESS F/F	BEND SIDE ACCESS	DN 40	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023

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SCHEDULE TO STANDARDSMARK LICENCE

Model Identification	Model Name	Brand Name	Product Description	Product Type	Nominal Size (DN)	Stiffness Classification	Joint Type	Colour	Date Endorsed
AUDE02 50	50 90°BEND SIDE ACCESS F/F	ERA	50 90°BEND SIDE ACCESS F/F	BEND SIDE ACCESS	DN 50	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE02 65	65 90°BEND SIDE ACCESS F/F	ERA	65 90°BEND SIDE ACCESS F/F	BEND SIDE ACCESS	DN 65	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE02 100	DWV PVC BEND M/F PLAIN	ERA	DWV PVC BEND M/F PLAIN	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE021 100	42° BEND M/F	ERA	42° BEND M/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE022 50	45°BEND WITH OPENING F/F	ERA	45°BEND WITH OPENING F/F	45°BEND	DN 50	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE023 100	88° BEND WIHE SMALL SIDE ACCESS F/F	ERA	88° BEND WIHE SMALL SIDE ACCESS F/F	88° BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE024 50	FLOOR GRATE ROUND	ERA	FLOOR GRATE ROUND	FLOOR GRATE ROUND	DN 50	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE024 80	FLOOR GRATE ROUND	ERA	FLOOR GRATE ROUND	FLOOR GRATE ROUND	DN 80	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE026 80/90	Plug waste shower	ERA	Plug waste shower	Plug waste shower	DN 80/90	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE03 100	100 45° BEND F/F	ERA	100 45° BEND F/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE03 150	150 45° BEND F/F	ERA	150 45° BEND F/F	BEND	DN 150	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE03 32	32 45°BEND F/F	ERA	32 45°BEND F/F	45°BEND	DN 32	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE03 40	40 45° BEND F/F	ERA	40 45° BEND F/F	BEND	DN 40	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE03 50	50 45° BEND F/F	ERA	50 45° BEND F/F	BEND	DN 50	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE03 65	65 45° BEND F/F	ERA	65 45° BEND F/F	BEND	DN 65	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE03 80	80 45° BEND F/F	ERA	80 45° BEND F/F	BEND	DN 80	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE04 100	100 90°BEND SIDE ACCESS F/F	ERA	100 90°BEND SIDE ACCESS F/F	BEND SIDE ACCESS	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE05 100	100 45°BEND SIDE ACCESS F/F	ERA	100 45°BEND SIDE ACCESS F/F	BEND SIDE ACCESS	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE06 100	100 45° BEND M/F	ERA	100 45° BEND M/F	BEND	DN 100	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE06 40	40 45° BEND M/F	ERA	40 45° BEND M/F	BEND	DN 40	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE06 50	50 45° BEND M/F	ERA	50 45° BEND M/F	BEND	DN 50	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE06 65	65 45° BEND M/F	ERA	65 45° BEND M/F	BEND	DN 65	SN8	Solvent cement-tapered socket	Light Grey	30 May 2023

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SCHEDULE TO STANDARDSMARK LICENCE

Model Identification	Model Name	Brand Name	Product Description	Product Type	Nominal Size (DN)	Stiffness Classification	Joint Type	Colour	Date Endorsed
AUDE06 80	80 45° BEND M/F	ERA	80 45° BEND M/F	BEND	DN 80	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE07 40	40 90° Bend M/F	ERA	40 90° Bend M/F	BEND	DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE07 50	50 90° Bend M/F	ERA	50 90° Bend M/F	BEND	DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE08 50*40	50*40 45° Reducing Bend	ERA	50*40 45° Reducing Bend	REDUCING BEND	DN 50/DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDE09	100 5° BEND F/F	ERA	100 5° BEND F/F	BEND	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDF02	100 Flange	ERA	100 Flange	FLANGE	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDI01 100	100 INSPECTION TEST OPENING F/F	ERA	100 INSPECTION TEST OPENING F/F	INSPECTION TEST OPENING	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDI02 100	100 INSPECTION TEST OPENING M/F	ERA	100 INSPECTION TEST OPENING M/F	INSPECTION TEST OPENING	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDI03 100	INSPECTION TEST OPENING WITH ONE SOCKET THREAD F/F	ERA	INSPECTION TEST OPENING WITH ONE SOCKET THREAD F/F	INSPECTION TEST OPENING	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDO01	100 Off Set Pan Collar 25°	ERA	100 Off Set Pan Collar 25°	PAN CONNECTOR	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDO02	100 Pan Connector Concentric	ERA	100 Pan Connector Concentric	PAN CONNECTOR	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR01 100*40	100*40 SOCKET REDUCER M/F	ERA	100*40 SOCKET REDUCER M/F	SOCKET REDUCER	DN 100/DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR01 100*50	100*50 SOCKET REDUCER M/F	ERA	100*50 SOCKET REDUCER M/F	SOCKET REDUCER	DN 100/DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR01 100*65	100*65 SOCKET REDUCER M/F	ERA	100*65 SOCKET REDUCER M/F	SOCKET REDUCER	DN 100/DN 65	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR01 100*80	100*80 SOCKET REDUCER	ERA	100*80 SOCKET REDUCER	SOCKET REDUCER	DN 100/DN 80	SNB	Solvent cement-tapered socket	Light grey	30 May 2023
AUDR01 50*40	50*40 SOCKET REDUCER M/F	ERA	50*40 SOCKET REDUCER M/F	SOCKET REDUCER	DN 50/DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR01 65*40	65*40 SOCKET REDUCER M/F	ERA	65*40 SOCKET REDUCER M/F	SOCKET REDUCER	DN 65/DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR01 65*50	65*50 SOCKET REDUCER M/F	ERA	65*50 SOCKET REDUCER M/F	SOCKET REDUCER	DN 65/DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR01 80*50	80*50 SOCKET REDUCER M/F	ERA	80*50 SOCKET REDUCER M/F	SOCKET REDUCER	DN 80/DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR01 80*65	80*65 SOCKET REDUCER M/F	ERA	80*65 SOCKET REDUCER M/F	SOCKET REDUCER	DN 80/DN 65	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR02 100*50	100*50 LEVEL INVERT TAPER M/F	ERA	100*50 LEVEL INVERT TAPER M/F	LEVEL INVERT TAPER	DN 100/DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR02 100*65	100*65 LEVEL INVERT TAPER M/F	ERA	100*65 LEVEL INVERT TAPER M/F	LEVEL INVERT TAPER	DN 100/DN 65	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023

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Model Identification	Model Name	Brand Name	Product Description	Product Type	Nominal Size (DN)	Stiffness Classification	Joint Type	Colour	Date Endorsed
AUDR2 10780	10780 LEVEL INVERT TAPER M/F	ERA	10780 LEVEL INVERT TAPER M/F	LEVEL INVERT TAPER	DN 107DN 80	SNB	Solvent cement	Light grey	30 May 2023
AUDR2 150700	150700 LEVEL INVERT TAPER M/F	ERA	150700 LEVEL INVERT TAPER M/F	LEVEL INVERT TAPER	DN 150DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR2 50740	50740 LEVEL INVERT TAPER M/F	ERA	50740 LEVEL INVERT TAPER M/F	LEVEL INVERT TAPER	DN 50DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR2 65740	65740 LEVEL INVERT TAPER M/F	ERA	65740 LEVEL INVERT TAPER M/F	LEVEL INVERT TAPER	DN 65DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR2 65750	65750 LEVEL INVERT TAPER M/F	ERA	65750 LEVEL INVERT TAPER M/F	LEVEL INVERT TAPER	DN 65DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR2 80750	80750 LEVEL INVERT TAPER M/F	ERA	80750 LEVEL INVERT TAPER M/F	LEVEL INVERT TAPER	DN 80DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR2 80765	80765 LEVEL INVERT TAPER M/F	ERA	80765 LEVEL INVERT TAPER M/F	LEVEL INVERT TAPER	DN 80DN 65	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR3 100740	100740 PIPE REDUCER M/F	ERA	100740 PIPE REDUCER M/F	PIPE REDUCER	DN 100DN 40	SNB	Solvent cement	Light grey	30 May 2023
AUDR3 100750	100750 PIPE REDUCER M/F	ERA	100750 PIPE REDUCER M/F	PIPE REDUCER	DN 100DN 50	SNB	Solvent cement	Light grey	30 May 2023
AUDR3 100780	100780 PIPE REDUCER M/F	ERA	100780 PIPE REDUCER M/F	PIPE REDUCER	DN 100DN 80	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR3 50740	50740 PIPE REDUCER M/F	ERA	50740 PIPE REDUCER M/F	PIPE REDUCER	DN 50DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR4 100	100 Reducing Coupling M/F	ERA	100 Reducing Coupling M/F	REDUCING COUPLING	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDR5 40732	SOCKET REDUCER M/F	ERA	SOCKET REDUCER M/F	SOCKET REDUCER	DN 40732	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD501 100	100 FLOOR WASTE GULLY	ERA	100 FLOOR WASTE GULLY	FLOOR WASTE GULLY	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD501 100750	100750 FLOOR WASTE GULLY	ERA	100750 FLOOR WASTE GULLY	FLOOR WASTE GULLY	DN 100DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD501 100765	100765 FLOOR WASTE GULLY	ERA	100765 FLOOR WASTE GULLY	FLOOR WASTE GULLY	DN 100DN 65	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD501 80750	80750 FLOOR WASTE GULLY	ERA	80750 FLOOR WASTE GULLY	FLOOR WASTE GULLY	DN 80	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD501 80765	80765 FLOOR WASTE GULLY	ERA	80765 FLOOR WASTE GULLY	FLOOR WASTE GULLY	DN 80DN 65	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUD502 100	FLOOR WASTE GULLY	ERA	FLOOR WASTE GULLY	FLOOR WASTE GULLY	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT01 100	100 88° JUNCTION F/F	ERA	100 88° JUNCTION F/F	SWEEP JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT01 32	88° JUNCTION F/F	ERA	88° JUNCTION F/F	88° JUNCTION	DN 32	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT01 40	40 88° JUNCTION F/F	ERA	40 88° JUNCTION F/F	SWEEP JUNCTION	DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT01 50	50 88° JUNCTION F/F	ERA	50 88° JUNCTION F/F	SWEEP JUNCTION	DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023

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Model Identification	Model Name	Brand Name	Product Description	Product Type	Nominal Size (DN)	Stiffness Classification	Joint Type	Colour	Date Endorsed
AUDT01 65	65 88° JUNCTION F/F	ERA	65 88° JUNCTION F/F	SWEEP JUNCTION	DN 65	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT01 80	80 88° JUNCTION F/F	ERA	80 88° JUNCTION F/F	SWEEP JUNCTION	DN 80	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT010 100	45° JUNCTION F/F	ERA	45° JUNCTION F/F	45° JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT011 150/100	150/100 REDUCING TEE	ERA	150/100 REDUCING TEE	45° JUNCTION	DN 150/DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT012 150	150 88° JUNCTION	ERA	150 88° JUNCTION	SWEEP JUNCTION	DN 150	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT013 150	150 45° JUNCTION WITH ONE THREAD END	ERA	150 45° JUNCTION WITH ONE THREAD END	45° JUNCTION	DN 150	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT014 100	88° PLAIN JUNCTION M/F	ERA	88° PLAIN JUNCTION M/F	88° PLAIN JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT015 100/90	88° JUNCTION	ERA	88° JUNCTION	88° JUNCTION	DN 100/90	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT016 100/90	45° JUNCTION	ERA	45° JUNCTION	45° JUNCTION	DN 100/90	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT016 100/96	45° JUNCTION	ERA	45° JUNCTION	45° JUNCTION	DN 100/96	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT017 100	SNAP TEE	ERA	SNAP TEE	SNAP TEE	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT018 100	88° SIDE SMALL ACCESS JUNCTION F/F	ERA	88° SIDE SMALL ACCESS JUNCTION F/F	88° SIDE ACCESS JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT019 40	SLAB JUNCTION 88° PLAIN	ERA	SLAB JUNCTION 88° PLAIN	SLAB JUNCTION 88° PLAIN	DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT019 50	SLAB JUNCTION 88° PLAIN	ERA	SLAB JUNCTION 88° PLAIN	SLAB JUNCTION 88° PLAIN	DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT02 100	100 45° JUNCTION M/F WITH TWO THREAD END	ERA	100 45° JUNCTION M/F WITH TWO THREAD END	45° JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT020 100/90	45° JUNCTION WITH PORT	ERA	45° JUNCTION WITH PORT	45° JUNCTION WITH PORT	DN 100/90	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT021 100	45° SIDE ACCESS JUNCTION RIGHT BIG WHEEL F/F	ERA	45° SIDE ACCESS JUNCTION RIGHT BIG WHEEL F/F	45° SIDE ACCESS JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT022 100	45° SIDE ACCESS JUNCTION LEFT BIG WHEEL F/F	ERA	45° SIDE ACCESS JUNCTION LEFT BIG WHEEL F/F	45° SIDE ACCESS JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT023 100	88° SIDE ACCESS ELBOW RIGHT BIG WHEEL F/F	ERA	88° SIDE ACCESS ELBOW RIGHT BIG WHEEL F/F	88° SIDE ACCESS ELBOW	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT024 100	COUPLING RIGHT BIG WHEEL F/F	ERA	COUPLING RIGHT BIG WHEEL F/F	COUPLING	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT03 100	100 45° JUNCTION F/F WITH ONE THREAD END	ERA	100 45° JUNCTION F/F WITH ONE THREAD END	45° JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023

Licence No: SMK26022

Issued Date: 5 June 2023

This schedule supersedes all previously issued schedules



* For details of manufacture, refer to the licensee

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SCHEDULE TO STANDARDSMARK LICENCE

Model Identification	Model Name	Brand Name	Product Description	Product Type	Nominal Size (DN)	Stiffness Classification	Joint Type	Colour	Date Endorsed
AUDT04 100	100 45°SIDE ACCESS JUNCTION LEFT F/F	ERA	100 45°SIDE ACCESS JUNCTION LEFT F/F	SIDE ACCESS JUNCTION LEFT	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT05 100	100 45°SIDE ACCESS JUNCTION RIGHT F/F	ERA	100 45°SIDE ACCESS JUNCTION RIGHT F/F	SIDE ACCESS JUNCTION RIGHT	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT06 100	100 45° JUNCTION F/F	ERA	AUDT06 45° JUNCTION	45° JUNCTION	DN 100	SNB	Solvent cement	Light grey	30 May 2023
AUDT06 32	45°JUNCTION F/F	ERA	45° JUNCTION F/F	45° JUNCTION	DN 32	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT06 40	40 45°JUNCTION F/F	ERA	40 45°JUNCTION F/F	45° JUNCTION	DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT06 50	50 45°JUNCTION F/F	ERA	50 45°JUNCTION F/F	45° JUNCTION	DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT06 65	65 45°JUNCTION F/F	ERA	65 45°JUNCTION F/F	45° JUNCTION	DN 65	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT06 80	80 45°JUNCTION F/F	ERA	80 45°JUNCTION F/F	45° JUNCTION	DN 80	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT07 100	100 88°SIDE ACCESS JUNCTION F/F	ERA	100 88°SIDE ACCESS JUNCTION F/F	SIDE ACCESS JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT08 100	100 88°PLAIN JUNCTION F/F	ERA	100 88°PLAIN JUNCTION F/F	PLAIN JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDT09 100	88°JUNCTION M/F	ERA	88° JUNCTION M/F	88° JUNCTION	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDW01 100	100 DUST CAP	ERA	100 DUST CAP	DUST CAP	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDW01 150	150 DUST CAP	ERA	150 DUST CAP	CAP	DN 150	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDW01 40	40 DUST CAP	ERA	40 DUST CAP	DUST CAP	DN 40	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDW01 50	50 DUST CAP	ERA	50 DUST CAP	DUST CAP	DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDW01 65	65 DUST CAP	ERA	65 DUST CAP	DUST CAP	DN 65	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDW01 80	80 DUST CAP	ERA	80 DUST CAP	DUST CAP	DN 80	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDW03 100	100 THREADED CAP	ERA	100 THREADED CAP	THREADED CAP	DN 100	SNB	Solvent cement	Light grey	30 May 2023
AUDW03 150	150 THREADED CAP	ERA	150 THREADED CAP	THREADED CAP	DN 150	SNB	Threaded end	Light grey	30 May 2023
AUDW04 100	100 Floor Flange	ERA	100 Floor Flange	FLOOR FLANGE	DN 100	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023
AUDW04 50	COVER PANEL	ERA	COVER PANEL	COVER PANEL	DN 50	SNB	Solvent cement-tapered socket	Light Grey	30 May 2023

End of Record

Licence No: SMK26022

Issued Date: 5 June 2023

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BEST ENVIRONMENTAL PRACTICE



ApprovalMark International hereby grants:

ERA PIPING (ZHEJIANG) CO., LTD

No.1118 Huangjiao Road,
Huangyan Economic Development Zone
Taizhou, Zhejiang, China

Best Environmental Practice - PVC

Evaluated to:

AS/NZS 1260:2017 – PVC-U Pipes and fittings for drain, waste and vent applications

AS/NZS 1477:2017 - PVC-U pipes and fittings for pressure applications

AS/NZS 2053.2:2001 - Conduits and fittings for electrical installations - Rigid plain conduits and fittings of insulating material

The licensee complies with the requirements of Best Environmental Practice – PVC as per the relevant specified Standards and Section 7 within the Green Building Council of Australia Literature Review and Best Practice Guidelines for the Life Cycle of PVC Building Product's. The manufacturers technical documentation has been reviewed and found compliant with the following:

- **Manufacture of PVC Resin**
- **Manufacture and end of life management of PVC products**
- **Use of PVC Recyclate in PVC products**

Any changes introduced to above requirements shall immediately be reported to ApprovalMark International in order to examine the validity of the certificate.

Certificate No. BEP-AMI 78010

Issued: 5 May 2022

Originally Certified: 28 August 2017

Expires: 28 August 2023

Current Certification: 5 May 2022

John PRASAD
Director

ApprovalMark International Pty Ltd
18/33 Holbeche Road, Arndell Park 2148, Australia
www.approvalmark.com

ApprovalMark

BEP
CERTIFIED

APPENDIX C - SUPPLIER CONTACTS

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