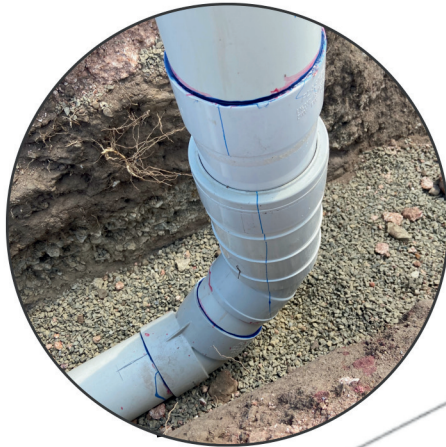
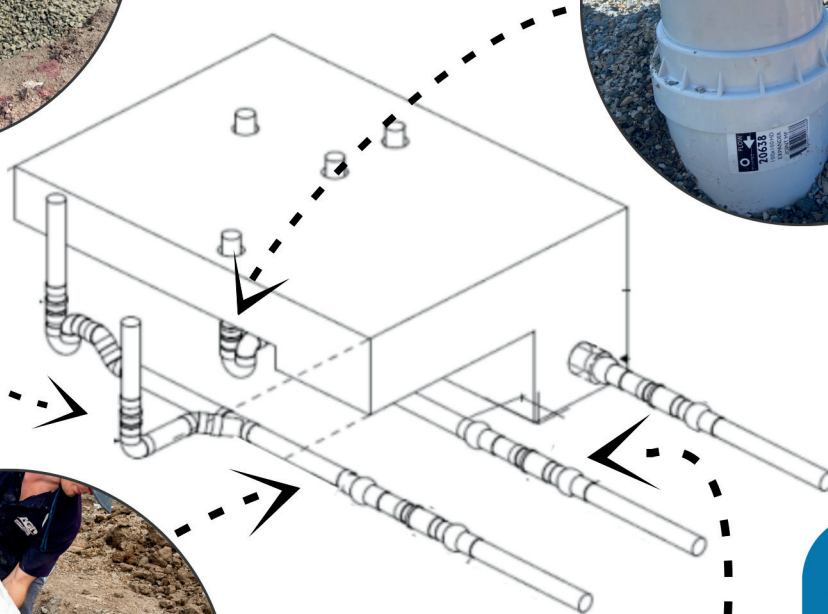


PLUMBING IN REACTIVE AND UNSTABLE SOILS?

AS2870 5.6 & Appendix G in AS3500.2 provides guidance on risk proofing your drainage system against the stress of ground movement



Expander Joints on the vertical risers protect fittings under the slab when experiencing heave.



The installation of a bentonite clay plug prevents the ingress of moisture under the slab via the plumbers trench.



Combination Joints provide movement in every direction according to the classification of the soil.

For more information or to see the full range of Articulated Joints and Flexible Connections contact Plastec on (07) 5413 4444 or visit

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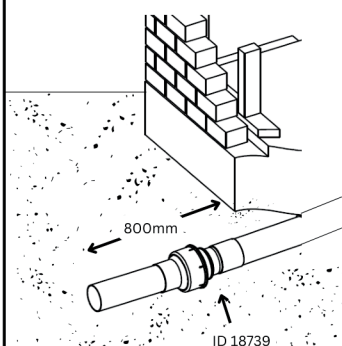
AS2870 5.6 & Appendix G in AS3500.2 provides guidance on risk proofing your drainage system against the stress of ground movement

Soil Class	Soil Type	Differential Movement	Where Pipework Exits the Slab/Footing	Vertical Risers Under the Slab	Stormwater	Graded Risers and Changes of Direction
A	Most sand and rock sites	0-10mm	Not Required	Not Required	Not Required	Not Required
S	Slightly Reactive Soil	10-20mm				
M	Moderate Reactive Soil	20-40mm	Not Required	Not Required	Expander Joints on Downpipes Recommended	Not Required
H1	Highly Reactive Soil	40-60mm	Combination Swivel (x2) and Expansion Joint, within 800mm of slab Installation of either Clay Plug, Plastic or Concrete barrier	Expander Joints on all vertical risers	Expander Joints on Downpipes	Expander Joints on all graded risers Flexitec Couplings or Swivel Joints downstream of junctions or bends connected to the main drain
H2	Very Highly Reactive Soil	60-75mm	Combination Swivel (x2) and Expansion Joint, within 800mm of slab Installation of either Clay Plug, Plastic or Concrete barrier	Expander Joints on all vertical risers	Expander Joints on Downpipes	Expander Joints on all graded risers Flexitec Couplings or Swivel Joints downstream of junctions or bends connected to the main drain
E	Extremely Reactive Soil	76mm plus	Combination Swivel (x2) and Expansion Joint, within 800mm of slab Installation of either Clay Plug, Plastic or Concrete barrier	Expander Joints on all vertical risers Flexitec Couplings or Swivel Joints on all vertical risers	Expander Joints on Downpipes Flexitec Couplings or Swivel joints downstream of junctions and bends	Expander Joints on all graded risers Flexitec Couplings or Swivel Joints downstream of junctions or bends connected to the main drain
Detail			Detail (1a) Detail (1b) Detail (5)	Detail 2(a) Detail 2(b)	Detail 3(a) Detail 3(b)	Detail 4(a) Detail 4(b)

1(a)

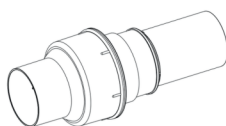
Pipework Exiting the Slab H1, H2

Combination Joint Swivel & Expansion



Combination Joint

Dia 100mm MxF ID - 18634
Dia 100mm MxM ID - 18635
Dia 100mm FxF ID - 18739
Recommended



Expansion
Dia 100mm +/- 50 (100mm)

Deflection
40° +/- 20 Degrees

Joints should be set in the mid position of their range

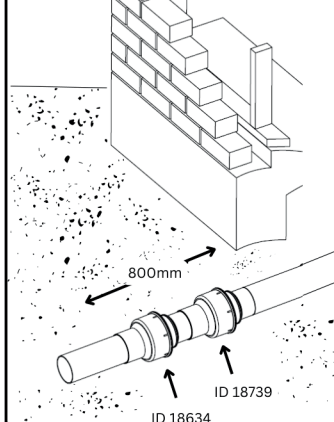


Must be the first fitting when pipework exits from under the slab or through the footing

1(b)

Pipework Exiting the Slab H1, H2 & E

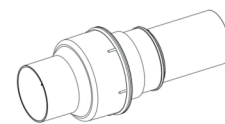
Fully Articulated Combination Joint



Must be the first fitting when pipework exits from under the slab or through the footing

Combination Joint x 2

Dia 100mm MxF ID - 18634
Dia 100mm MxM ID - 18635
Dia 100mm FxF ID - 18739



Expansion
Dia 100mm +/- 50 (100mm)

Deflection
40° +/- 20 Degrees

Joints should be set in the mid position of their range

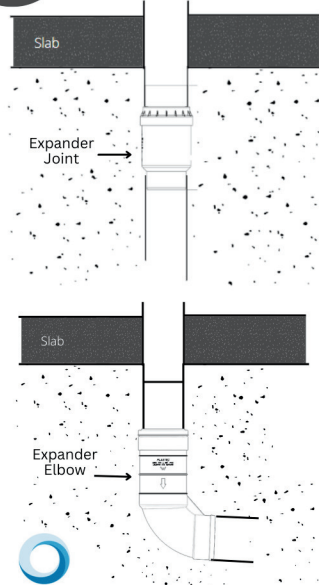
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www.plastec.com.au



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2(a) Vertical Risers Under the Slab for H1 & H2



Expander Joint
Dia 100mm FxM ID - 20638
Dia 100mm FxF ID - 20640
Expansion +/- 50 (100mm)

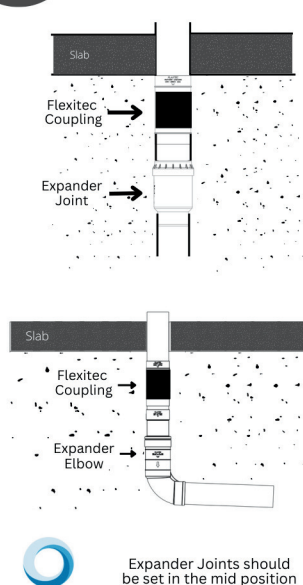
Expander Elbow 100 x 90°
Dia 100mm ID - 17317
Expansion +/- 75 (150mm)

Expander Elbow 100 x 45°
Dia 100mm ID - 17319
Expansion +/- 75 (150mm)

Expander Joints should be set in the mid position of their range

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2(b) Vertical Risers Under the Slab class E



Expander Joint
Dia 100mm FxM ID - 20638
Dia 100mm FxF ID - 20640
Dia 100mm MxF ID - 20642
Expansion +/- 50 (100mm)

Expander Elbow 100 x 90°
Dia 100mm ID - 17317
Expansion +/- 75 (150mm)

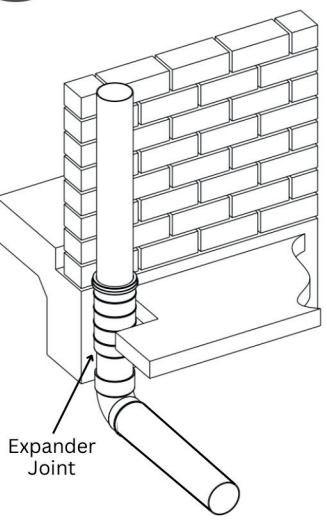
Expander Elbow 100 x 45°
Dia 100mm ID - 17319
Expansion +/- 75 (150mm)

Flexitec Coupling
100mm ID - 17728
Angular deflection 15°+

Expander Joints should be set in the mid position of their range

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3(a) Stormwater Downpipe for M, H1 & H2

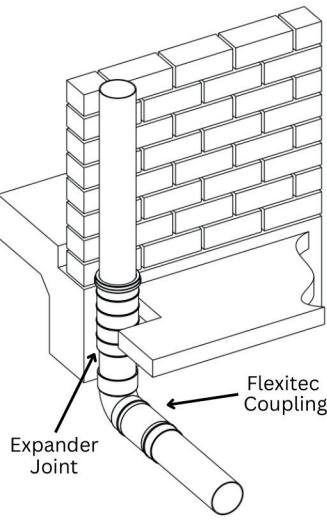


Expander Joint
Dia 90mm ID - 15131
Dia 100mm ID - 15130
Dia 150mm ID - 15642
Expansion
Dia 90mm +/- 50 (100mm)
Dia 100mm +/- 75 (150mm)
Dia 150mm +/- 100 (200mm)

Expander Joints should be set in the mid position of their range

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3(b) Stormwater Downpipe for E class



Expander Joint
Dia 90mm ID - 15131
Dia 100mm ID - 15130
Dia 150mm ID - 15642
Expansion
90mm +/- 50 (100mm)
100mm +/- 75 (150mm)
150mm +/- 100 (200mm)

Expander Joints should be set in the mid position of their range

Flexitec Coupling
100mm ID - 17728
150mm ID - 18732
Angular deflection 15°+

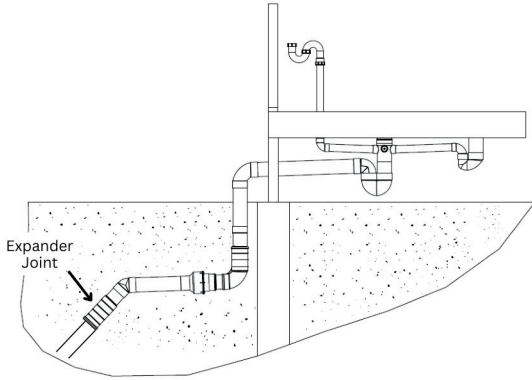
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4(a) Graded Riser for class H1, H2 & E



Expander Joint

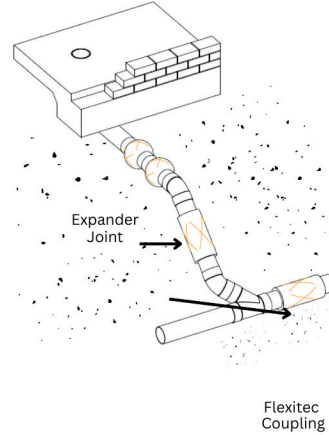
Dia 100mm FxM ID - 20638
Dia 100mm FxF ID - 20640

Expansion +/- 50 (100mm))

Expander Joints should be set in the mid position of their range



4(b) Change of Direction for class H1, H2 & E



Expander Joint

Dia 100mm FxM ID - 20638
Dia 100mm FxF ID - 20640

Expansion +/- 50 (100mm))

Expander Joints should be set in the mid position of their range

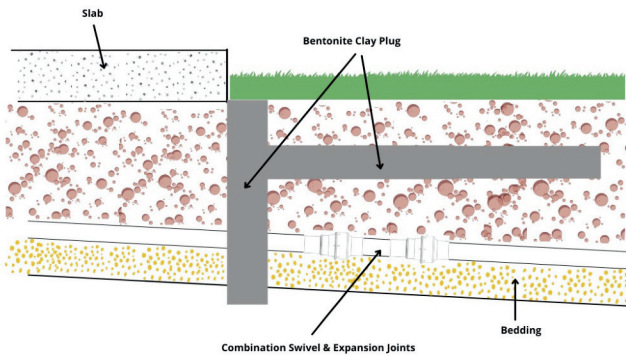


Flexitec Coupling

100mm ID - 17728
Angular deflection 15°+

Install immediately downstream of any junction or bend

5 Clay Plug Detail for class H1, H2 & E



Clay Plug 25kg Bag

ID - 19698

Two 25kg Bags fill a cardboard biscuit

Clay Cardboard Biscuit

ID - 19696

750H x 400W x 150mm



Caloundra, Sunshine Coast Qld

Phone: (07) 5413 4444

Email: sales@plastec.com.au

www.plastec.com.au



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