

# STORM PLASTICS

## PVC SWIVEL AND EXPANSION JOINTS

### Product Description:

Storm Plastics Expansion and Swivel Joints allow for stress free DWV pipework performance, while simultaneously providing a flexibility at normally fixed branch positions, thus compensating for soil movement in reactive solids.

### Scope of use

For use in above and below ground sewer and storm water pipe systems.

### Relevant building code clauses

- B2 Durability - B2.3.1 (a) (b)
- G13 Foul water – G13.3.1, G13.3.2
- F2 Hazardous Building Materials – F2.3.1

### Contribution to code compliance:

#### [B2 Durability - B2.3.1\(a\)](#)

When installed in accordance with DLM Wallace/ Storm Plastics literature and NZBC G13 Acceptable Solutions, Storm Plastic fittings will provide durability of 50 years for connections that are difficult to access.

#### [G13 Foul water – G13.3.1, G13.3.2, G13.3.3, G13.3.4](#)

When installed in accordance with DLM Wallace/ Storm Plastics literature, and NZBC G13 Acceptable Solutions, Storm Plastics pipes and fittings will contribute to meeting these performance requirements.

Storm Plastics fittings are manufactured in accordance with AS/NZS 1260:2017 – PVCu pipes and fittings for drain, waste and vent applications.

#### [F2 Hazardous Building Materials – F2.3.1](#)

Storm Plastics pipes & fittings are safe when handled and are a non-hazardous material. There is no requirement for this product to comply with acceptable solution F2/AS1.

### Standards:

Storm Plastics fittings are manufactured in accordance with AS/NZS 1260:2017 – PVCu pipes and fittings for drain, waste and vent applications.

Storm Plastics pipes and fittings are Watermark certified (WM-021411)

### Composition:

Storm Plastics pipes and fittings are manufactured primarily of PVC-U. Swivel joints are protected by a black plastic dust membrane, which prevent loose or muddy soil from entering the “o” rings for the products life.

### Range:

ITEM CODE	ITEM DESCRIPTION
EXPANDA100	100MM M & F EXPANDA JOINT SOLVENT CONNECTIONS
EXPANDA150	150MM M & F EXPANDA JOINT SOLVENT CONNECTIONS
SWIVEL100	100MM M & F SWIVEL JOINT SOLVENT CONNECTIONS
SWIVEL150	150MM M & F SWIVEL JOINT SOLVENT CONNECTIONS
SJ22520	225MM M & F SWIVEL JOINT SOLVENT CONNECTIONS

### Limitations:

Storm Plastics have a degree of lateral and angular motion. It is best practice to use these products at 50/50 setting to allow for expansion and compression but these settings can be set in different ratios depending on the application of the product.

For example:

- 1) SWIVEL100 - 100MM M&F SWIVEL JOINT (SJ10015)

Allows +/- 15° rotation and 50mm expansion.

- 2) EXPANDA100 – 100MM EXPANDA JOINT (DW100150)

Expanda Joint allows up to 150mm movement.

Storm plastics provide a flexible option to be used in a range of different applications. It is important to predetermine the degree of motion the product might be subjected to, and exceeding the parameters will cause product failure. It is also recommended to have mitigation plans in case the product fails.

These products are mainly designed to be used in drainage, waste, ventilation systems, and repair works. These products are not suitable for pressure pipes. It is best practice to consult with engineers for local regulations as these may differ from region to region.

### Installation Requirements:

It is recommended that provision be made for movement in the design and installation of all PVC-U drainage systems without exception, i.e., Site Classes A, S, M, H, E, and to manage and mitigate the risk of cracked buildings.

It is considered that flexible joints, swivel, and longitudinal expansion fittings, be a mandatory requirement for all drainage systems.

The designated location for such fittings should be given consideration by a qualified soil engineer with a working knowledge of the performance characteristics of pipework drainage systems.

All installation works are to be conducted by a COMPETENT LICENCED TRADESPERSON in accordance with the manufacturer’s directions, where applicable, to best work practices.

IT IS A MANDATORY REQUIREMENT that all builders obtain a “Soil Report” from a qualified soil engineer prior to commencing on-site structural works.

IT IS ALSO MANDATORY REQUIREMENT that all builders obtain a “seismic report” from a qualified engineer/regulatory authority prior to commencing on-site structural works as these products are also used for seismic mitigation applications.

It is important to note that Swivel Joint assemblies are not intended to be used as a bend or for a change in direction in a drainage system beyond three (3) degrees.

The “Expanda Joint,” being a flexible fitting, does need extra care and attention for maximum performance. For the benefit of the installer, a removable cardboard spacer is inserted into the bottom of the main socket section. This spacer should only be removed at the time of installation. In the event that it is displaced prior to installation (when held in storage), it is important that there should always be a gap of not less than 20mm between the end of the spigot and the bottom of the socket. At the time of installation, the spacer is to be removed and the spigot pushed home to the bottom of the socket then immediately withdrawn to the nominated working position. The working position for the Expanda Joint should be set halfway or as nominated by the site soil engineer.

#### **Maintenance Requirements:**

There are no specific maintenance requirements for Storm Plastics pipes and fittings.

#### **Warning and Bans:**

Storm Plastics pipes and fittings are not subject to warning or ban under section 26 of the Building Act 2004

#### **Place of Manufacture:**

Overseas

#### **Distributor Details:**

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