

Interfaces and joints - Introduction

This Technical Note is one of a series describing the design and construction of interfaces and joints in building envelopes. The series comprises:

- TN 64 Gaskets*
- TN 78 Interfaces and joints – Introduction*
- TN 79 Interfaces and joints – Air permeability and water penetration resistance*
- TN 80 Interfaces and joints – Thermal performance*
- TN 81 Interfaces and joints – Sealant materials*
- TN 82 Interfaces and joints – Sealant movement joints*
- TN 83 Interfaces and joints – Breathable seals*

This Technical Note covers the principles of designing and constructing interfaces and joints in building envelopes.

Introduction

An interface occurs between two different forms of construction in the building envelope. An interface may for instance be between:

- Wall and wall
- Wall and roof
- Window and wall

An interface may comprise a single joint but normally has at least an outer and an inner joint.

By comparison a joint occurs where two components meet and may occur within an element of construction or be part of an interface. For instance the joint between IGUs in a glazing screen.

A joint may pass through the full thickness of the construction or may be present in just one layer of the envelope. The performance of a joint in one layer of the envelope is dependent on the performance of joints in all other layers. When designing the joints comprising an interface the performance of all the joints should be considered as part of a holistic approach to design.

This Technical Note gives an introduction to the requirements to be considered in the design and construction of interfaces and joints in the building envelope.

Interface design and construction

A single sub contractor may be responsible for the construction on both sides of an interface. However, the different forms of construction are often part of separate cladding packages and the responsibility of different sub-contractors. In the latter case it is essential that:

- The detailing of the interface is agreed by both sub-contractors,
- Responsibility for construction is appropriately assigned to one sub-contractor or the other.

The Main Contractor plays an important role in coordinating design detailing, assigning responsibility for construction and overseeing the QA procedures.

Purpose of interfaces

Interfaces are required where:

- Different forms of construction meet,
- Components such as windows or doors are built into the envelope.

Purpose of joints

Joints may be required for one or more of the following reasons: