Titebond offers three adhesives that pass D3498-19, the most stringent and important subfloor adhesive specification on the market. But why is this test so important and why should you pay attention to it?
What is ASTM D3498-19?

ASTM D3498-19 is the most recent version of the D3498 specification that covers minimum performance standards and test requirements for gap-filling construction adhesives for bonding wood structural panels consisting of plywood or OSB to wood based floor system framing, particularly dimension lumber or wood I-joists. It is created by the American Society for Testing and Materials, or ASTM, an organization designed to create technical standards and testing for a variety of building constructions.*

What does this specification test for?

This specification covers the minimum standard your adhesive should meet to ensure a solid subfloor construction. It is a test of the overall quality and performance of the adhesive in various conditions.

I've heard of D3498, but why was it updated?

The ASTM D3498 standard was originally created in 1976 and tested the ability of an adhesive to bond plywood to dimension lumber and wood I-joists. With the development and increase of OSB being used as subfloor panels, the testing needed to be adjusted to reflect the current building conditions.

What are the requirements to achieve this specification?

In order to achieve this specification, an adhesive must meet or exceed testing in four areas:

1. The adhesive must meet minimum strength requirements on dry, wet and frozen lumber
2. The adhesive must be able to fill a gap of 1/8in and meet a minimum strength requirement on dry lumber
3. The adhesive must pass a moisture resistance test by being submerged in water before being tested for a minimum strength requirement
4. The adhesive must pass a durability test by examining its flexibility and brittleness

Are there different classifications for D3498-19?

Yes, adhesives are classified by both panel type and gap class. There are three classifications for panel types:

- **Type P** - The adhesive is qualified to be used with plywood subfloor panels
- **Type O** - The adhesive is qualified to be used with OSB subfloor panels
- **Type P/O** - The adhesive is qualified to be used with both OSB and plywood panels

The adhesive will also be classified as one of two gap classes:

- **Class 1/8in** - The adhesive is qualified to fill a 1/8in gap in the subfloor
- **Class 1/16in** - The adhesive is qualified to fill a 1/16in gap in the subfloor

How can I tell if an adhesive meets D3498-19?

An adhesive meeting D3498-19 will have this listed under the specification section of their label along with the panel type and gap class that it is classified under. An adhesive meeting the highest specification will be classified as: Class 1/8in, Type P/O subfloor adhesive in accordance with ASTM D3498-19.

Bottom Line?

Adhesives that pass D3498-19 are tested and proven to lead to structurally sound subfloor constructions, creating peace of mind and limiting callbacks. Choose Titebond subfloor adhesives to guarantee a quality subfloor construction for years to come.

Titebond is one of the first adhesive manufacturers to offer three adhesives that not only exceed the requirements of ASTM D3498-19, but are covered by the industry’s best warranty against subfloor pops and squeaks.

Visit Titebond.com for the most up-to-date product information.