

# Nichigo **G-Tape** Technical Report

## Specially Shaped Screw Water Sealability Nichigo G-Tape 3040BK

### 1. Test Objective

Nichigo G-Tape 3040BK has been used in building construction fields for a long time. It has been confirmed by professional people that 3040BK has excellent waterproof. The objective of this test is to evaluate 3040BK's waterproof feature for specially shaped screw (Fig. 1). Waterproof feature of 3040BK for specially shaped screw was measured by screw water seal test.



Fig.1 Appearance of specially shaped screw

### 2. Test Method

#### 2-1) Screw water seal test

We estimated waterproof feature of 3040BK as below steps (Fig. 2).

- Step 1 : Leave the test specimen at 73F50%. (At least four hours)
- Step 2 : Place the tape by test press machine on substrate
- Step 3 : Specially shaped screw is driven through batten (penetrate)
- Step 4 : Apply sealant around the outside rim of container.  
Wait for 24 hours as r.t.
- Step 5 : Set a cup under each Nail
- Step 6 : Pour colored water(Height:1.2inch) at 40F
- Step 7 : Wait for 24 hours at 40F and inspect backside of plywood by eye
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- Step 6 : Pour colored water(Height:1.2inch) at 40F
- Step 7 : Wait for 24 hours at 40F and inspect backside of plywood by eye

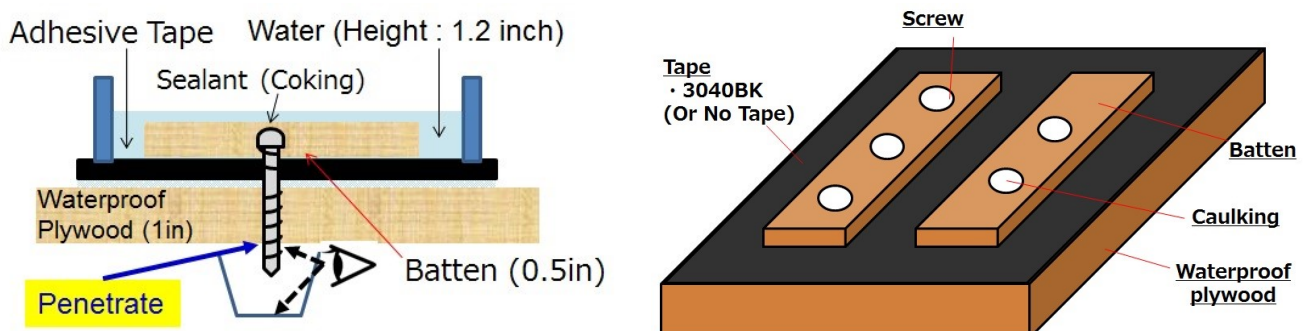


Fig.2 Estimated image of specially shaped screw water seal test

### 3. AAMA screw water sealability

When we did not place tape, leak was confirmed inside all (5 points) screw holes. On the other hand, when we placed 3040BK, there was slightly leak around screw holes (Fig. 3,4).

Chart.1 Water Leakage by specially shaped screw water seal test

| <b>Water Leakage by specially shaped screw water seal test<br/>(Where and how leakage was confirmed)</b> |  |
|--|--|
| <b>3040BK</b>  | Slightly leak (Around screw holes)       |
| <b>No Tape</b>   | Leak (Inside all (5 points) screw holes) |



Fig.2 Appearance after specially shaped screw water seal test when we placed 3040BK

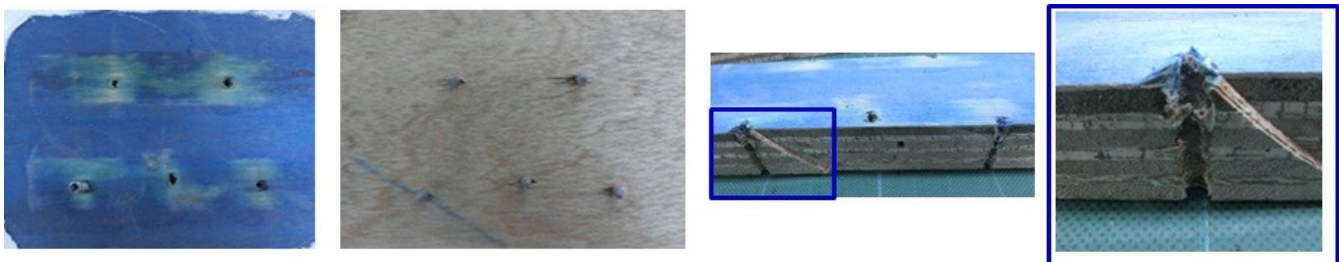


Fig.3 Appearance after specially shaped screw water seal test when we placed no tape

### 5. Observation

Water penetrates plywood and water leakage occurs especially around screw when it rains. However, when 3040BK was placed on plywood, water leakage was dramatically improved (decreased) compared to without tape. Both substrate and adhesive of 3040BK have excellent waterproof and also high dimensional stability. It was concluded that 3040BK can be used as a window or deck flashing tape with excellent waterproof and high weather resistance.

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