

Nichigo G-Tape Technical Report

AAMA 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 screw designated by AAMA (The American Architectural Manufacturers Association). Waterproof feature of 3040BK for AAMA screw was measured by screw water seal test.

2. Test Method

2-1) Screw water seal test

We estimated waterproof feature of 3040BK as below steps (Fig. 1).

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 : Screw is driven through a vinyl shim (intervene material)

Screw : Zinc plated #8 pan head screw (designated by AAMA)

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

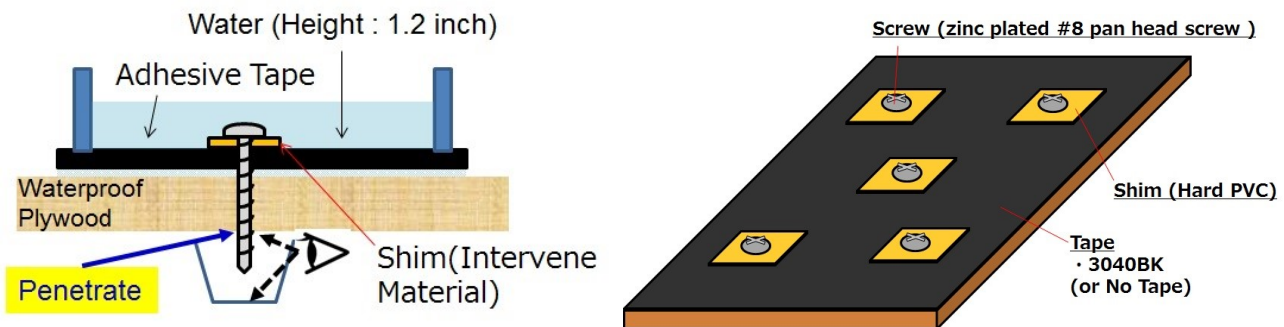


Fig.1 Estimated image of AAMA screw water seal test

3. AAMA screw water sealability

When we did not place tape, leak was confirmed around screw and side of plywood. On the other hand, when we placed 3040BK, there was no leak around screw or backside (Fig. 2,3)

Chart.1 Water Leakage by AAMA screw water seal test

Water Leakage by AAMA screw water seal test (Numbers of leakage / numbers of test points)	
3040BK	No leak 0/5 (Leak was not confirmed around screw or backside)
No Tape	Leak 5/5 (Leak was confirmed around screw and side of plywood)



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

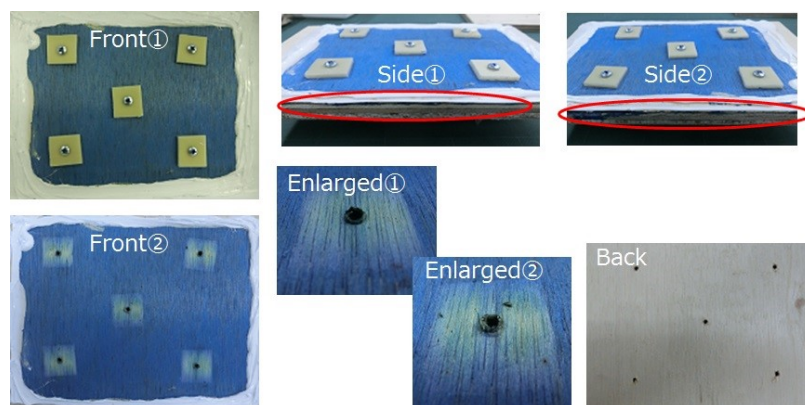


Fig.3 Appearance after AAMA screw water seal test when we placed no tape

5. Observation

Water penetrates plywood and water leakage occurs especially around screw when it rains. However, when 3040BK was placed on plywood, no water leakage was confirmed inside or backside of plywood. 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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