

Peel Jigs for test standards (FINAT, ASTM, AFERA, PSTC)

A number of test methods and standards employed by various industry bodies call upon specific peel jigs and associated accessories to be used in conjunction with a tensile tester. Mecmesin has developed a range of peel jigs and accessories to meet the demands of the most commonly used standards.

Part No.	Description	QC connection
PDV13016-C	180 degree Peel Jig- lower (FINAT 1 & FINAT 3)	Yes- QC 20
PDV15031	90 degree Assisted Peel Table incl. rails for fixing Float Glass- lower (FINAT 2)	Yes- QC 20
PSV15030	Float Glass 2" wide x 8" long for use with above Assisted Peel Table	N / A
PSV14155	Standard FINAT Roller- 2kg	N / A
PSV13007	Sample cutter (15 mm and 1 inch wide) + Protective Mat	N / A
PDV13016-A	Tack Test Jig- lower (FINAT 9)	Yes- QC 20



180 degree Peel Jig (FINAT 1) – Peel Adhesion

Remove backing material from 25 mm wide strip
 Affix to test plate (PDV13016-C) and roll twice using standard roller (PSV14155)
 Fit test plate (PDV13016-C) to base of tensile tester
 Fit strip into upper grip (Mec227-BG50) of tensile tester so that test angle is 180 degrees
 Separate the adhesive strip from the test plate at a rate of 300 mm/min
 Record data from the central section of the adhesive strip as it is peeled
 Calculate the average of the peel force and express the value as Newton/25 mm width
 Describe the type of failure (cohesive failure, adhesive transfer, etc.)

Note: tests to be conducted after 20 mins and 24 hours.



- ◀ Test Plate (PDV13016-C) shown with 25 mm strip being held in Upper Grip
- ▼ Test Plate (PDV13016-C) for connection to a QC-20 Fixing Post of test stand

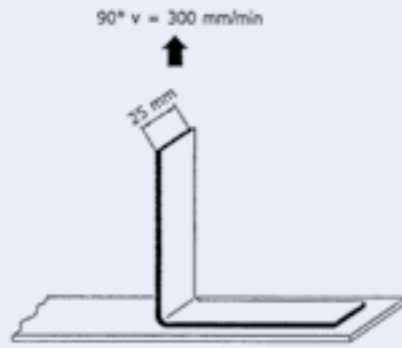


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90 degree Peel Jig (FINAT 2) – Peel Adhesion

- Typically gives lower values than FINAT 1 and is considered useful when failure mode of materials is 'paper tear'
- Remove backing material from 25 mm wide strip
- Affix strip to float glass (PSV15030) and roll twice using standard roller (PSV14155)
- Fit float glass into horizontal pull-peel table (PDV15031) positioned on base of tensile tester
- Fit strip into upper grip (Mec227-BG50) of tensile tester. Test angle is now maintained at 90 degrees
- Separate the adhesive strip from the test plate at a rate of 300 mm/min
- Record data from the central section of the adhesive strip as it is peeled
- Calculate the average of the peel force and express the value as Newton/25 mm width
- Describe the type of failure (cohesive failure, adhesive transfer, paper tear, etc.)



Note: tests to be conducted after 20 mins and 24 hours.

180 degree Peel Jig (FINAT 3) – Low-speed Release Force to separate release backing

- Affix 50 mm wide strip to test plate (PDV13016-C) using double-sided tape
- Fit test plate (PDV13016-C) to base of tensile tester
- Fit strip into upper grip (Mec227-BG50) of tensile tester so that test angle is 180 degrees
- Separate the adhesive strip from the test plate at a rate of 300 mm/min
- Record data from the central section of the adhesive strip as it is peeled
- Calculate the average of the peel force and express the value as Newton/50 mm width

Note: To ensure good contact between release backing and adhesive the tests are to be conducted 20 hours after strips have been compressed together.



▲ Pull-Peel Table (PDV15031) shown with 25mm strip being held in Upper Grip (Mec227-BG50)



▲ Test Plate (PDV13016-C) shown with 50 mm strip being held in Upper Grip (Mec227-BG50)



▲ Test Plate (PDV13016-C) for connection to a QC-20 Fixing Post of test stand

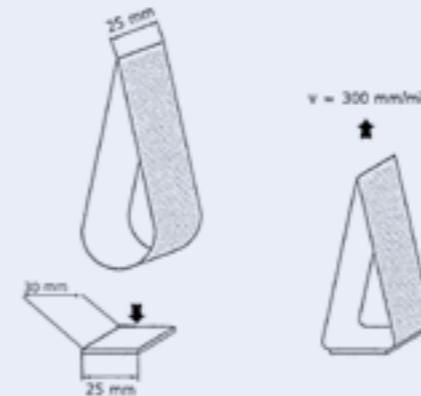
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Tack Test Jig (FINAT 9) – Loop Tack (aka "Quick-stick") measurement

- Remove backing material from 25 mm wide strip
- Form loop with adhesive surface being outermost
- Fit loop into upper grip (Mec227-BG50) of tensile tester
- Compress the loop to lower Tack Test Jig (PDV13016-A) at 300 mm/min until full contact over float glass plate has been achieved
- Immediately reverse the tester to separate the loop from the glass plate at a tensile rate of 300 mm/min
- Record the maximum separation force

Note: If adhesive transfer or paper tear occurs this should be recorded



◀ Test Plate (PDV13016-A) shown with 25 mm strip being held in Upper Grip (Mec227-BG50)

▼ Test Plate (PDV13016-A) shown with float glass plate fitted



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Additional Accessories

Standard Roller (FINAT) - applies a standard pressure to the specimen irrespective of the variation in hand pressure on the handle.



◀ Roller of 85 mm diameter and 50 mm width. Fitted with rubber surface of Shore hardness A 80. Weight is 2kg

Part no: PSV14155

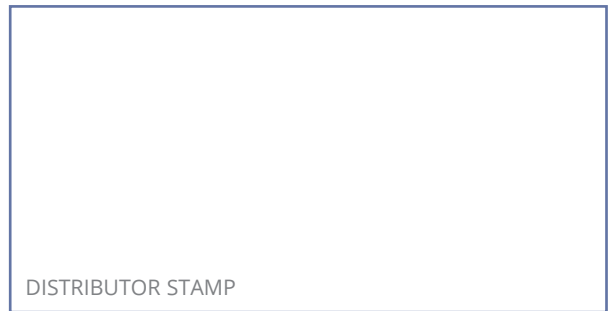
Sample Cutters - Sample cutting accessories allow specimen strips to be cut cleanly and straight to the required width as indicated by the test standard Supplied with protective mat, 15 mm x 1 inch width adjustment block and spare cutter blades.



◀ 15 mm and 1 inch wide cutter. Specimen widths from approximately 15 mm – 70 mm may be cut.

The Width Adjustment Block quickly enables sample widths of 15 mm or 1 inch to be prepared for ASTM F88, JIS Z 0238:1998 and JIS Z 1707:2019.

Part no: PSV13007



Mecmesin reserves the right to alter equipment specifications without prior notice.
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