

Standard Specification for Non-Reinforced PVC Geomembrane Seams (ASTM D7408)



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Test Performed By:		Material Tested:		
Date:		Manufacturer:		
Test Temperature:		Nominal Thickness:		
		Sample Notes:		
Specimen Dimensions:	Test Specimen Number	Measured Peak Load, P (N)	Location of Break Code – ASTM D6392	Seam Strength (kN/m) $\frac{P}{W_1}$
25.4 mm (W_1) x 150 mm				
Seam Shear Strength Rate of grip separation: 508 mm/min Grip separation: Length of seam – 50 mm	1			
	2			
	3			
	4			
	5			
Seam Peel Strength Rate of grip separation: 50.8 mm/min Grip Separation: 50 mm	1			
	2			
	3			
	4			
	5			

Average Seam Shear Strength (kN/m):	
Average Seam Peel Strength (kN/m):	
ASTM D7408 Material Specification for Minimum Seam Shear Strength (kN/m):	
ASTM D7408 Material Specification for Minimum Seam Peel Strength (kN/m):	
Seam Passes Seam Shear and Peel Strength Specification	Yes/No

ASTM D6392- Location of Break Codes

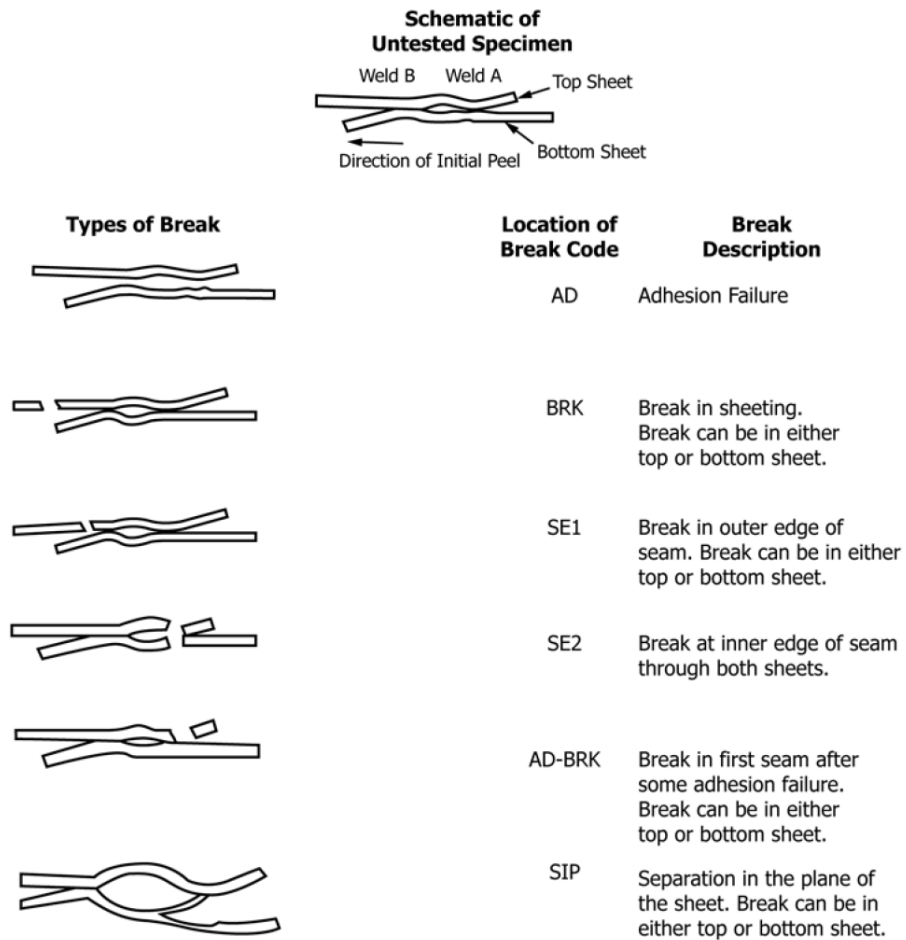
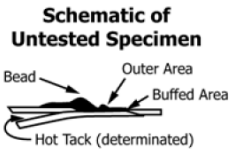


FIG. 3 Locus-of-Break Codes for Dual Hot Wedge Seams in Unreinforced Geomembranes Tested for Seam Strength in Shear and Peel Modes



Types of Break	Location of Break Code	Break Description
	AD1	Failure in adhesion. Specimens may also delaminate under the bead and break through the thin extruded material in the outer area.
	AD2	Failure in adhesion.
Off-Center Bead	AD-WLD ⁽¹⁾	Break through the fillet.
	SE1	Break at seam edge in the bottom sheet (applicable to shear only).
	SE2	Break at seam edge in the top sheet (applicable to shear only).
	SE3	Break at seam edge in the bottom sheet (applicable to peel only).
	BRK1	Break in the bottom sheeting. A "B" in parentheses following the code means the specimen broke in the buffed area.
	BRK2	Break in the top sheeting. A "B" in parentheses following the code means the specimen broke in the buffed area.
	AD-BRK	Break in the bottom sheeting after some adhesion failure between the fillet and the bottom sheet.
	HT	Break at the edge of the hot tack for specimens which could not be delaminated in the hot tack.
	SIP	Separation in the plane of the sheet.

(1) Acceptance of AD-WLD breaks may depend on whether test values meet a minimum specification value.

FIG. 4 Locus-of-Break Codes for Fillet Extrusion Weld Seams in Unreinforced Geomembranes Tested for Seam Strength in Shear and Peel Modes