



Insulation Facings

Technical Data Sheet



Arkent[®]



ARK-F40

Foil / Scrim / Kraft

FACING COMPOSITION	DESCRIPTION	VALUES (ENGLISH)	VALUES (METRIC)
Foil	Aluminum	0.0003 inch	6.5 micron
Adhesive	Flame Resistant		
Reinforcing	Tri-Directional Fiberglass	2 / inch (MD) 3 / inch (XD)	8 / 100mm (MD) 12 / 100mm (XD)
Kraft	Natural	31 lbs / 3000 ft ²	50 g/m ²

PHYSICAL PROPERTIES	TEST METHOD	VALUES (ENGLISH)	VALUES (METRIC)
Basis Weight	Scale	18 lbs / 1000 ft ²	87 g/m ²
Permeance (WVTR)	ASTME96/ProcedureA	0.02 perm	1.15 ng/N.s
Tensile Strength	ASTM C1136	45 lbs/inch (MD) 39 lbs/inch (XD)	7.9 kN/m (MD) 6.9 kN/m (XD)
Bursting Strength	ASTM D774	45 psi	3.1 kg/cm ²
Thickness	Micrometer Caliper	0.008 inch	200 micron
Fire Rating	ASTM E84	Class B	Class B
Accelerated Aging	ASTM C1258 30 Days @ 95% RH, 120°F (49°C)	No Corrosion No Delamination	No Corrosion No Delamination
Low Temperature Resistance	ASTM D1790 -40°F (-40°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
High Temperature Resistance	4 hours @ 240°F (116°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
Water Immersion	24 hours @ 73°F (23°C)	No Delamination	No Delamination
Dimensional Stability	ASTM D1204	0.5%	0.5%
Emissivity	ASTM E408	0.03	0.03

Physical Properties based upon statistical average, Weight / Thickness +/-10%

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ARK-F50

Foil / Scrim / Kraft

FACING COMPOSITION	DESCRIPTION	VALUES (ENGLISH)	VALUES (METRIC)
Foil	Aluminum	0.0003 inch	6.5 micron
Adhesive	Flame Resistant		
Reinforcing	Tri-Directional Fiberglass	2 / inch (MD) 3 / inch (XD)	8 / 100mm (MD) 12 / 100mm (XD)
Kraft	Natural	43 lbs / 3000 ft ²	70 g/m ²

PHYSICAL PROPERTIES	TEST METHOD	VALUES (ENGLISH)	VALUES (METRIC)
Basis Weight	Scale	20 lbs / 1000 ft ²	93 g/m ²
Permeance (WVTR)	ASTME96/ProcedureA	0.02 perm	1.15 ng/N.s
Tensile Strength	ASTM C1136	31 lbs/inch (MD) 17 lbs/inch (XD)	5.5 kN/m (MD) 3 kN/m (XD)
Bursting Strength	ASTM D774	26 psi	1.8 kg/cm ²
Thickness	Micrometer Caliper	0.006 inch	160 micron
Fire Rating	ASTM E84	Class A	Class A
Accelerated Aging	ASTM C1258 30 Days @ 95% RH, 120°F (49°C)	No Corrosion No Delamination	No Corrosion No Delamination
Low Temperature Resistance	ASTM D1790 -40°F (-40°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
High Temperature Resistance	4 hours @ 240°F (116°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
Water Immersion	24 hours @ 73°F (23°C)	No Delamination	No Delamination
Dimensional Stability	ASTM D1204	0.5%	0.5%
Emissivity	ASTM E408	0.03	0.03

Physical Properties based upon statistical average, Weight / Thickness +/-10%

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ARK-F80LD

Foil / Scrim / Kraft / Foil

FACING COMPOSITION	DESCRIPTION	VALUES (ENGLISH)	VALUES (METRIC)
Foil	Aluminum	0.0003 inch	6.5 micron
Adhesive	Flame Resistant		
Reinforcing	Tri-Directional Fiberglass	5 / inch (MD) 4 / inch (XD)	20 / 100mm (MD) 16 / 100mm (XD)
Kraft	Natural	49 lbs / 3000 ft ²	80 g/m ²
Foil	Aluminum	0.0003 inch	6.5 micron

PHYSICAL PROPERTIES	TEST METHOD	VALUES	REQUIREMENT
Flammability Index	AS 1530.2-1993	≤ 5 (Low)	High (> 5) / Low (≤ 5)
Basis Weight	Scale	145 g/m ²	Value
Nominal Thickness	Caliper	0.23 mm	Value
Duty	AS/NZS 4200.1:2017	Heavy Duty	Classification
Edge Tear Resistance	AS/NZS 4200.1:2017	60 N (MD) 57 N (LD)	> 45 N > 45 N
Tensile Strength	AS 1301.448s-91	≥ 10.4 kN/m (MD) 6.37 kN/m (LD)	> 7.5 kN/m (MD) > 4.5 kN/m (XD)
Vapour Control	ASTM E96	Class 1 Vapour Barrier	Class 1 to 4
Vapour Permeance	ASTM E96	1.15 ng/N.s	Value
Water Control	AS/NZS 4201.4:1994	Water Barrier	Classification
Air Control	AS/NZS 4200.1:2017	Air Barrier	Classification
Resistance to Dry Delamination	AS/NZS 4201.1:1994	Pass	Pass
Resistance to Wet Delamination	AS/NZS 4201.2:1994	Pass	Pass
Shrinkage (Repeated wetting & drying)	AS/NZS 4201.3:1994	0.0%	< 0.5%
Electrical Conductivity	AS/NZS 4200.1:2017	Conductive	Classification
Emittance Classification	AS/NZS 4200.1:2017	Reflective	Classification

Physical Properties based upon statistical average, Weight / Thickness +/-10%

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ARK-W20

Polyester / Scrim / Kraft

FACING COMPOSITION	DESCRIPTION	VALUES (ENGLISH)	VALUES (METRIC)
White Film	FR Polyester	13 lbs / 3000 ft ²	21g/m ²
Adhesive	Flame Resistant		
Reinforcing	Tri-Directional Fiberglass	5 / inch (MD) 5 / inch (XD)	20 / 100mm (MD) 20 / 100mm (XD)
Kraft	Natural	15 lbs / 3000 ft ²	25 g/m ²

PHYSICAL PROPERTIES	TEST METHOD	VALUES (ENGLISH)	VALUES (METRIC)
Basis Weight	Scale	18 lbs / 1000 ft ²	87 g/m ²
Permeance (WVTR)	ASTME96/ProcedureA	0.09 perm	5.1 ng/N.s
Tensile Strength	ASTM D828	41 lbs/inch (MD) 38 lbs/inch (XD)	7.2 kN/m (MD) 6.6 kN/m (XD)
Thickness	Micrometer Caliper	0.006 inch	160 micron
Fire Rating	ASTM E84	Class B	Class B
Accelerated Aging	ASTM C1258 30 Days @ 95% RH, 120°F (49°C)	No Corrosion No Delamination	No Corrosion No Delamination
Low Temperature Resistance	ASTM C1263 4 Hours at -20°F (-29°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
High Temperature Resistance	ASTM C1263 Modified 4 hours at 240°F (116°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
Water Immersion	24 hours @ 73°F (23°C)	No Delamination	No Delamination
Dimensional Stability	ASTM D1204	0.25%	0.25%
Light Reflectance	ASTM C523	85%	85%

Physical Properties based upon statistical average, Weight / Thickness +/-10%

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ARK-W30ILD Black

Polyester / Scrim / Kraft

FACING COMPOSITION	DESCRIPTION	VALUES (ENGLISH)	VALUES (METRIC)
Black Film	Metallized Polyester	13 lbs / 3000 ft ²	21 g/m ²
Adhesive	Flame Resistant		
Reinforcing	Tri-Directional Fiberglass	5 / inch (MD) 5 / inch (XD)	20 / 100mm (MD) 20 / 100mm (XD)
Kraft	Natural	15 lbs / 3000 ft ²	25 g/m ²

PHYSICAL PROPERTIES	TEST METHOD	VALUES (ENGLISH)	VALUES (METRIC)
Basis Weight	Scale	21 lbs / 1000 ft ²	101 g/m ²
Permeance (WVTR)	ASTME96/ProcedureA	0.02 perm	1.15 ng/N.s
Tensile Strength	ASTM D828	49 lbs/inch (MD) 40 lbs/inch (XD)	8.6 kN/m (MD) 7.0 kN/m (XD)
Thickness	Micrometer Caliper	0.007 inch	170 micron
Fire Rating	ASTM E84	Class A	Class A
Accelerated Aging	ASTM C1258 30 Days @ 95% RH, 120°F (49°C)	No Corrosion No Delamination	No Corrosion No Delamination
Low Temperature Resistance	ASTM C1263 4 hours at -20°F (-29°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
High Temperature Resistance	ASTM C1263 Modified 4 hours at 240°F (116°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
Water Immersion	24 hours @ 73°F (23°C)	No Delamination	No Delamination
Dimensional Stability	ASTM D1204	0.25%	0.25%
Light Reflectance	ASTM C523	85%	85%

Physical Properties based upon statistical average, Weight / Thickness +/-10%

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ARK-W30ILD

Polyester / Scrim / Kraft

FACING COMPOSITION	DESCRIPTION	VALUES (ENGLISH)	VALUES (METRIC)
White Film	Metallized Polyester	13 lbs / 3000 ft ²	21 g/m ²
Adhesive	Flame Resistant		
Reinforcing	Tri-Directional Fiberglass	5 / inch (MD) 5 / inch (XD)	20 / 100mm (MD) 20 / 100mm (XD)
Kraft	Natural	15 lbs / 3000 ft ²	25 g/m ²

PHYSICAL PROPERTIES	TEST METHOD	VALUES (ENGLISH)	VALUES (METRIC)
Basis Weight	Scale	21 lbs / 1000 ft ²	101 g/m ²
Permeance (WVTR)	ASTME96/ProcedureA	0.02 perm	1.15 ng/N.s
Tensile Strength	ASTM D828	49 lbs/inch (MD) 40 lbs/inch (XD)	8.6 kN/m (MD) 7.0 kN/m (XD)
Thickness	Micrometer Caliper	0.007 inch	170 micron
Fire Rating	ASTM E84	Class A	Class A
Accelerated Aging	ASTM C1258 30 Days @ 95% RH, 120°F (49°C)	No Corrosion No Delamination	No Corrosion No Delamination
Low Temperature Resistance	ASTM C1263 4 hours at -20°F (-29°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
High Temperature Resistance	ASTM C1263 Modified 4 hours at 240°F (116°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
Water Immersion	24 hours @ 73°F (23°C)	No Delamination	No Delamination
Dimensional Stability	ASTM D1204	0.25%	0.25%
Light Reflectance	ASTM C523	85%	85%

Physical Properties based upon statistical average, Weight / Thickness +/-10%

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ARK-W40

Polyester / Scrim / Polyester

FACING COMPOSITION	DESCRIPTION	VALUES (ENGLISH)	VALUES (METRIC)
White Film	FR Polyester	13 lbs / 3000 ft ²	21 g/m ²
Adhesive	Flame Resistant		
Reinforcing	Tri-Directional Fiberglass	5 / inch (MD) 4 / inch (XD)	20 / 100mm (MD) 16 / 100mm (XD)
Film	Metallized Polyester	0.0005 inch	12.7 micron

PHYSICAL PROPERTIES	TEST METHOD	VALUES (ENGLISH)	VALUES (METRIC)
Basis Weight	Scale	16 lbs / 1000 ft ²	80 g/m ²
Permeance (WVTR)	ASTME96/ProcedureA	0.02 perm	1.15 ng/N.s
Tensile Strength	ASTM D828	40 lbs/inch (MD) 31 lbs/inch (XD)	7.0 kN/m (MD) 5.4 kN/m (XD)
Thickness	Micrometer Caliper	0.006 inch	155 micron
Fire Rating	ASTM E84	Class B	Class B
Accelerated Aging	ASTM C1258 30 Days @ 95% RH, 120°F (49°C)	No Corrosion No Delamination	No Corrosion No Delamination
Low Temperature Resistance	ASTM C1263 4 Hours at -20°F (-29°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
High Temperature Resistance	ASTM C1263 Modified 4 hours at 240°F (116°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
Water Immersion	24 hours @ 73°F (23°C)	No Delamination	No Delamination
Dimensional Stability	ASTM D1204	0.25%	0.25%
Light Reflectance	ASTM C523	85%	85%

Physical Properties based upon statistical average, Weight / Thickness +/-10%

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ARK-W50

Polypropylene / Scrim / Kraft / Foil / Polyester

FACING COMPOSITION	DESCRIPTION	VALUES (ENGLISH)	VALUES (METRIC)
White Film	Polypropylene	0.0010 inch	25 micron
Adhesive	Flame Retardant		
Reinforcing	Tri-Directional Fiberglass	5 / inch (MD) 5 / inch (XD)	20 / 100mm (MD) 20 / 100mm (XD)
Kraft	Flame Retardant	31 lbs / 3000 ft ²	50 g/m ²
Film	Metallized Polyester	0.0005 inch	12.7 micron

PHYSICAL PROPERTIES	TEST METHOD	VALUES (ENGLISH)	VALUES (METRIC)
Basis Weight	Scale	32 lbs / 1000 ft ²	156 g/m ²
Permeance (WVTR)	ASTME96/ProcedureA	0.02 perm	1.15 ng/N.s
Tensile Strength	ASTM D828	65 lbs/inch (MD) 60 lbs/inch (XD)	11.4 kN/m (MD) 10.5 kN/m (XD)
Thickness	Micrometer Caliper	0.009 inch	250 micron
Fire Rating	ASTM E84	Class A	Class A
Accelerated Aging	ASTM C1258 30 Days @ 95% RH, 120°F (49°C)	No Corrosion No Delamination	No Corrosion No Delamination
Low Temperature Resistance	ASTM C1263 4 Hours at -20°F (-29°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
High Temperature Resistance	ASTM C1263 Modified 4 hours at 240°F (116°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
Water Immersion	24 hours @ 73°F (23°C)	No Delamination	No Delamination
Dimensional Stability	ASTM D1204	0.25%	0.25%
Light Reflectance	ASTM C523	85%	85%

Physical Properties based upon statistical average, Weight / Thickness +/-10%

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ARK-W55

Polyester / Scrim / Polyester

FACING COMPOSITION	DESCRIPTION	VALUES (ENGLISH)	VALUES (METRIC)
Gray Film	FR Polyester	6 lbs / 3000 ft ²	10 g/m ²
Adhesive	Flame Resistant		
Reinforcing	Tri-Directional Fiberglass	5 / inch (MD) 4 / inch (XD)	20 / 100mm (MD) 16 / 100mm (XD)
White Film	FR Polyester	13 lbs / 3000 ft ²	21 g/m ²

PHYSICAL PROPERTIES	TEST METHOD	VALUES (ENGLISH)	VALUES (METRIC)
Basis Weight	Scale	14 lbs / 1000 ft ²	68 g/m ²
Permeance (WVTR)	ASTME96/ProcedureA	0.02 perm	1.15 ng/N.s
Tensile Strength	ASTM D828	36 lbs/inch (MD) 31 lbs/inch (XD)	6.3 kN/m (MD) 5.4 kN/m (XD)
Thickness	Micrometer Caliper	0.005 inch	135 micron
Fire Rating	ASTM E84	Class B	Class B
Accelerated Aging	ASTM C1258 30 Days @ 95% RH, 120°F (49°C)	No Corrosion No Delamination	No Corrosion No Delamination
Low Temperature Resistance	ASTM C1263 4 Hours at -20°F (-29°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
High Temperature Resistance	ASTM C1263 Modified 4 hours at 240°F (116°C)	Remains Flexible No Delamination	Remains Flexible No Delamination
Water Immersion	24 hours @ 73°F (23°C)	No Delamination	No Delamination
Dimensional Stability	ASTM D1204	0.25%	0.25%
Light Reflectance	ASTM C523	85%	85%

Physical Properties based upon statistical average, Weight / Thickness +/-10%

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Building Better Envelopes. Together.



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