

VeeloVEIL
is the lightest, most
conductive, electrically
uniform material in the
aerospace composites
protection material
category.

APPLICATIONS

- Electromagnetic effects (EME)
- Lightning strike protection —
Passes Zone 1A, 200 kA
- EMI shielding
- LSP repair
- Electrical continuity on
composite skins
- Ground plane

FEATURES

- Continuous metalization of
nonwoven substrate, superior
electrical conductivity
- Delivering differentiated material
solutions with electrical properties
tailored to the application
- Multiple EME/survivability
applications and systems

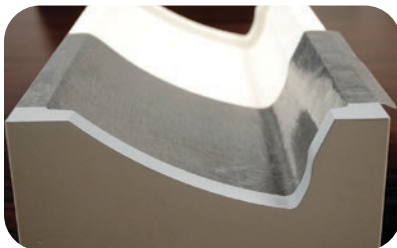


50–75% Weight Savings
Compared to Expanded Copper Foil



Protecting Composite Aerostructures from Electromagnetic Effects

VeeloVEIL						
Part #		VV-101a-60	VV-101a-40	VV-101a-30	VV-101a-20	Expanded Cu Foil
Basis weight	lb/ft ²	0.012	0.008	0.006	0.004	0.040
	g/m ²	60	40	30	20	195
Sheet resistance	mΩ/□	7-12	15-20	35-40	100-120	1.3-3.5
Shielding effectiveness [dB]	100 MHz	80	80	70	60	70
	1 GHz	75	75	75	65	50
	10 GHz	55	55	50	45	25
Lightning Strike Protection	Zone 1 & 2A	Yes	Yes	No	No	Yes
Weight Savings	VV vs ECF	3.3x	5x	7.5x	10x	N/A



VeeloVEIL conforms to complex curves

VEELOVEIL OUTPERFORMS OTHER COMMERCIALY AVAILABLE METALLIZED VEILS

- 3x less resistive and 36% lighter than the least resistive commercially available metallized nonwoven
- 4.5-300x higher specific conductivity than COTS metallized nonwovens

BENEFITS

- 3-100x lower sheet resistance than metallized nonwoven competitors at similar areal weights
- 50%-75%+ lighter than expanded copper foil (ECF)
- Vastly superior shielding performance (>100 MHz) compared to ECF
- Available in commercially integrated product forms (prepreg, film adhesive, surfacing film)
- Samples available for characterization, hand lay-ups, and testing
- 12" or 36" wide rollstock (dry)