

# TRI PROTECKT®

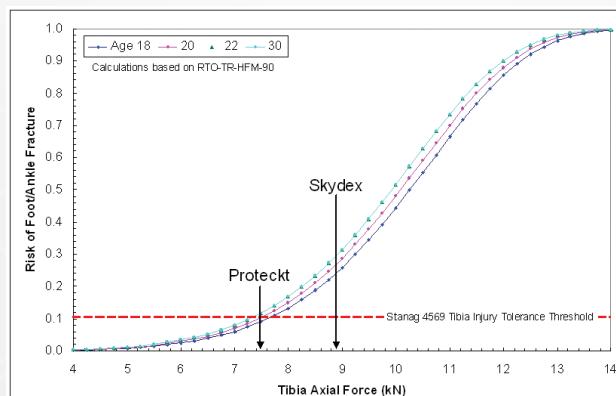
Proteckt® Energy Absorbing foams (EA), developed by Texas Research Institute Austin, Inc., (TRI Austin) are innovative, high-performing foam appliques designed to provide soldiers with superior cabin protection in tactical vehicles. The Proteckt® System is cost effective and lightweight, and can be custom designed for any tactical vehicle needing improved safety and protection. Placed in the interior cabin of HMMWVs, FMTVs, and other tactical vehicles, the Proteckt® energy absorbing system has the ability to significantly reduce fatal injuries.



## MGA SIMULATED MINE BLAST TEST RESULTS

Sample ID	Tibia Fz (N)				Average Tibia Compression Force (N)	Tibia Force Reduction (N)
	Upper Left	Lower Left	Upper Right	Lower Right		
Steel Plate	9891	10550	7661	9893	9498.75	--
Competitor 1.25 inch	9162	9357	7995	8955	8867.25	631.5
Proteckt 1 inch	8527	8101	7418	7242	7822	1676.75
Proteckt 1.5 inch	8450	7535	7033	6763	7445.25	2053.5

Date	Sample Description	Peak Amp. (G's)	Time (ms)	~ V (m/s)	Post-Test Comments
6/8/11	Baseline	304.7	5.9	6.96	• No visible damage.
6/9/11	Competitor	304.1	5.9	6.97	• No visible damage.
6/9/11	Proteckt 1"	303.9	5.8	6.85	• No visible damage.
6/9/11	Proteckt 1.5"	304.8	5.8	6.84	• No visible damage.



Stanag 4569 Tibia Tolerance Threshold Plot versus Peak Tibia Loading Change in Velocity of 7 (m/s) 5.9 (ms) Peak Load 304 G's 50th Percentile 180 Pound ATD.

## Proteckt®

A Product of TRI Austin

### Proteckt® Benefits

- Flooring blast or crash impact mats
- Head impact protection
- Side impact protection
- Seat bottoms
- Under side impact attenuation

### Proteckt® Features

- Reduces impact from vehicle rollovers, crashes and IED explosions
- Can be used as blast-mitigating flooring or interior padding
- Provides thermal and acoustic insulation
- No modification to vehicle interior is needed
- Can withstand multiple impacts without degrading performance
- Easy peel-and-stick installation



TRI Applied Technologies is the product arm for TRI Austin. Applied Technologies provides commercialization strategies, product production, sales support, and marketing efforts for products developed by TRI Austin.



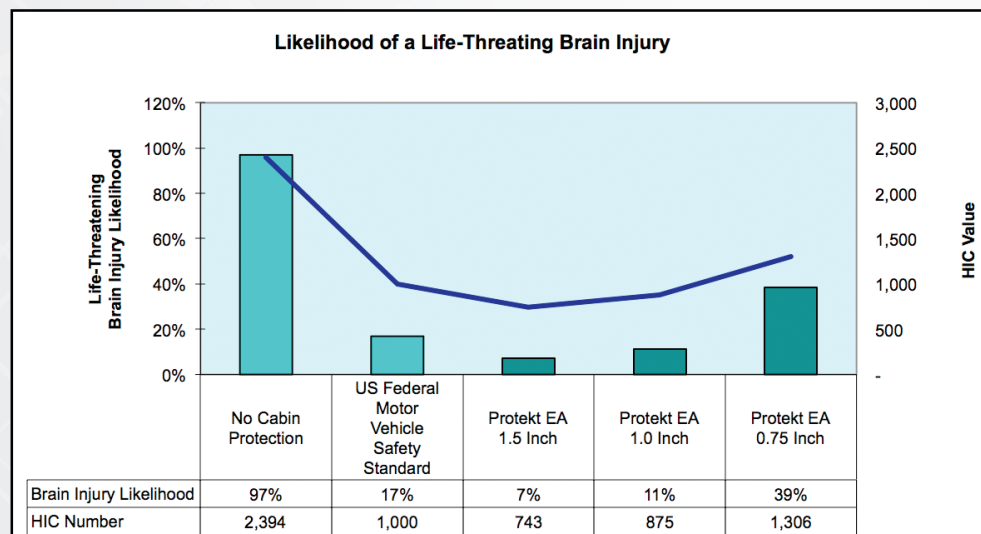
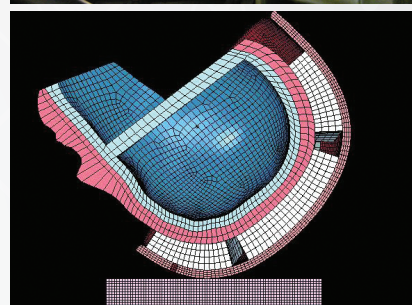
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## PRODUCT SPECIFICATIONS

Property	Test Method	Units	Value
Density	ASTM-D3575	psf	0.58lbs (1 inch thick)
Thermal Conductivity	ASTM-C177	(K)BTU-in / ft <sup>2</sup> -hr-°F	0.24
Thermal Resistance	ASTM-C177	(R) @ 70° F	3.4 per inch
Service Temp Range	ASTM-D3575	°C	-35 to 130
SAE J1400	ASTM-E90	-	Pending
NRC Rating	ASTM-C423	-	Pending
HIC Rating	FMVSS 201	Head Injury Criterion	875 (1" thick)
Flammability	FMVSS 302	Pass/Fail	(FR-EA )Pass - Self Extinguishing 1.5inch thick(Standed EA )Pass - Self Extinguishing 3/8 thick
Compressive Strength @75%	ASTM-D3575	psi	(Base EA) 111
Tensile Strength	ASTM-D3575	psi	(Base EA) 67
Water Absorbtion	ASTM-D3575	%	~1.0
Dimemsions (Thickness)	-	in.	3/4 to 2
Dimemsions (W x L)	-	in.	up to 48 x 72
Slip Test	ASTM-F1677		Pending
Surface Abrasion Resistance	ASTM-D1044	% loss	0.84 after 1,000 cycles
Chemical Resistance (Oil, Water, Cleaning Agents, CBW)	TARDEC	Pass/Fail	Pass
Salt Fog	ASTM B-117	Pass/Fail	Pass
Floor Blast Δ V 7 (m/s)	Stanag 4569	Risk of foot ankle damage	Pass
Toxic Gas Generation	BAA 7239/ ABD0031	Pass/Fail	Pass



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TO LEARN IF PROTECKT® CAN HELP YOU WITH YOUR APPLICATION, CONTACT:

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