



Introducing a **NEW**
foamed plastic that
will **reinvent...**

- Rotomolded Parts
- Injection Molded Parts
- Vacuum Formed Parts
- Blow Molded Parts

KEY FEATURES

- Durable Olefin Foamed Plastic – 100% Recyclable
- Uniformed Cell Structure
- Lighter Weight as compared to other Plastic Substrates
- Non-Abrasive
- Moisture Resistance
- Cost Competitive
- Low cost tooling to process
- Stiffness – various densities available
- Easy to handle
- Non-Toxic
- Reach & RoHS approved
- Conductive options available
- FMVSS302 Compliant



MARKETS

- HVAC - OEM'S
- MEDICAL
- POWER MOTOR SPORTS
- DUNNAGE -RETURNABLE PACKAGING
- AUTOMOTIVE
- TRUCK/BUS
- RECREATIONAL VEHICLES

APPLICATIONS

- DUCTS AND HOUSINGS
- TRAYS
- TOTES AND PARTITIONS
- COVERINGS
- GENERAL PURPOSE THERMOFORMING



FEDERALFOAM
TECHNOLOGIES, INC.

Federal Foam Technologies®, Inc.

600 Wisconsin Drive | New Richmond, WI 54017

phone 715.246.9500 | fax 715.246.9599

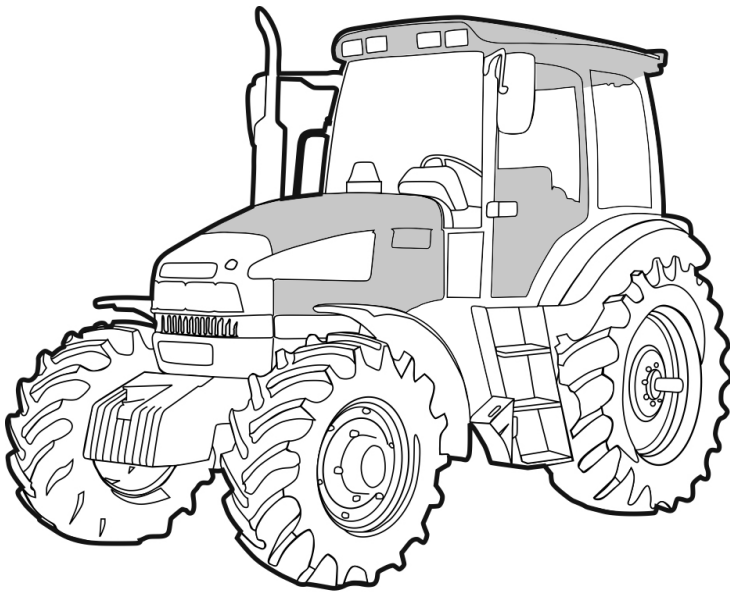
sales@federalfoam.com | www.federalfoam.com

ISO CERTIFIED 9001:2008; 14001:2014

formalite DUCT

This cutting-edge material technology achieves enhanced air management features through **Thermal Conductivity, Acoustic** and **Light-Weighting** properties as compared to traditional material types used in the production of air duct products. FFT's cost competitive process can allow for unique and flexible geometry not obtainable in traditional ducted processing methods. We can also guarantee that this material is 100% recyclable and is truly reclaimable.

- Competitive tooling expense
- Low part cost
- Advanced foam technology
- Ultra-lightweight
- Available in sheet and/or fabricated components and assemblies.



THERMAL RESISTANCE:

Max Temperature:
200°F (93°C)

PRODUCT WEIGHT

various densities/thicknesses available

PRODUCT ATTRIBUTES

- Rigid in nature (self-supporting)
- Durable
- Resistant to most organic solvents
- High mouldability
- 100% Recyclable
- Light Weight as compared to other plastic material(s)
- Boosted insulating properties
- Economical part price



Demanding Geometry/Flexibility

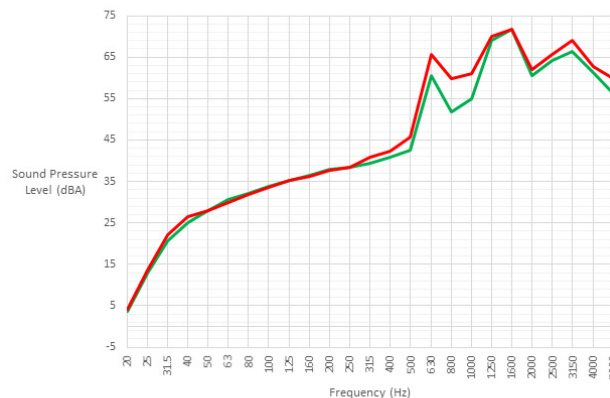
Formalite™ Duct is the newest generation of molded products, for air management parts, to be introduced into the marketplace by FFT. Our Sales and Engineering staff are equipped to share this exciting new development with you that will surely advance your vehicle's performance into the future. If you have questions, please call and let us show how we can create and deliver a collaborative VA/VE analysis on either an existing application or new development project.

ACOUSTICAL TEST DATA

THERMAL CONDUCTIVITY COMPARISON

Material	K (W/mK)	BTU*in/(h*ft2**F)
Formalite 19lb.	0.063	0.438
Balsa Wood	0.048	0.334
Fiberglass	0.04	0.278
Polycarbonate	0.19	1.321
Plywood	0.13	0.904
LDPE	0.33	2.294
HDPE	0.42	2.919
PP	0.1	0.695
EPS	0.03	0.209
PU Foam	0.03	0.209
PVC	0.19	1.321

Sound Pressure Level at End of Duct (Lower is Better)
Duct Length: 39.5"
Duct Cross Section/Diameter: 3.8"



FREQ (Hz)	Formalite dB (A)	ABS dB (A)
20	3.7	4.2
25	13.0	13.7
31.5	20.8	22.2
40	25.2	26.6
50	28.1	28.1
63	30.6	29.9
80	32.2	31.8
100	33.8	33.7
125	35.3	35.2
160	36.5	36.3
200	37.9	37.7
250	38.4	38.5
315	39.5	40.8
400	40.9	42.2
500	42.6	45.7
630	60.6	65.6
800	51.7	59.8
1000	55.0	61.0
1250	69.1	70.1
1600	71.7	71.7
2000	60.5	62.0
2500	64.1	65.6
3150	66.5	69.1
4000	61.4	62.7
5000	56.1	59.8

— Formalite-Preformed Thickness (4mm)- Post For Med Thickness (2-4 mm)- Density (19lb/ft³)
— ABS-Preformed Thickness (3.2mm)- Post For Med Thickness (2-3.2 mm)- Density (64lb/ft³)