



Duraco's Appliance Solutions

BONDING AND SEALING SOLUTIONS FOR APPLIANCE DESIGN



ABOUT DURACO

Conveniently located in Forest Park, IL Duraco's headquarters is the heart of quality manufactured products and efficient distribution. As a leading manufacturer and supplier for a variety of industrial markets, we exist to help people discover specialty tape solutions for their desired application needs including appliance, construction, fenestration and transportation. From the beginning of design conception to the end of production, you can count on an organization that has over 45 years of knowledge and experience. We have positioned ourselves to ensure your experience is seamless as we provide innovative adhesive solutions and top-quality customer service. From start to finish, our team of specialists is ready to help your business by being your one stop shop for all your tape needs.



ISO 9001

duraco.com | sales@duraco.com | 866 800 0775

WE SOLVE PROBLEMS WITH TAPE

From beginning to end, you can count on our team of experts that will be with you while working along side your engineers to find the perfect adhesive for your solution.



RESEARCH & TESTING
CAPABILITIES



HIGH QUALITY
CONVERTER



ADHESIVE COATING
CAPABILITIES



TECHNICAL
EXPERTISE



HANDS
ON

CAPABILITIES

Coating Excellence

Our solvent, hot-melt and aqueous coating technologies offer a wide selection of adhesive solutions to suit your application requirements.

Material Selection and Lamination

With a diverse range of supplier partners we have a developed supply base for foams, films and other carrier materials which we combine with our adhesive systems in our high-speed laminating equipment.

Die-Cutting / Converting

In our Forest Park facility we run a 24 hour operation where we continually invest in machinery. Our goal is to provide cost-efficient solutions to our customers by optimizing converting rates, material yield and effective put-up. Our processes include skiving, slitting, spooling, and multiple types of die-cutting. Custom fabrication abilities allow for specialized put-ups like kiss cut, individual pieces, overhang liners (OHL), hole and / or scrap removal.

Technical Support and a Commitment to Quality

Quality product is a science. Our adhesive and material testing facilities along with manufacturing process controls assure the correct product is designed and produced to meet our customer's demands.

duraco.com | sales@duraco.com | 866 800 0775

GASKETING & SEALING

MATERIAL AND APPLICATION CONSIDERATIONS

When selecting a material for your application, various factors must be considered. Some of those key considerations include:

Performance

- Thickness – gap fill
- Compression deflection
- Open Cell vs. Closed Cell

Environmental Factors

- Compliance – UL, NEMA, IEC
- Operating temperature range
- Flammability rating

Adhesive

- Single vs. Double-sided
- Rubber or Acrylic
- Direct Coat vs. Film

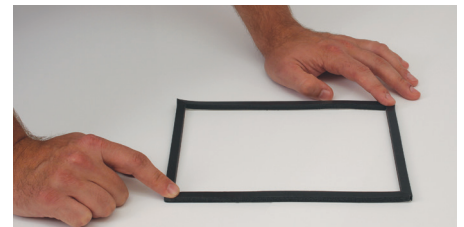
Other Considerations

- Rolls or Die-cut pieces
- Kiss cut on a roll or pad
- Individual pieces



DESIGN TIPS

- Target 25 – 50% compression for best performance
- A gasket's width should be equal to or larger than its height
- A channel prevents the gasket from rolling and limits excessive compression that can damage the seal



ASK US ABOUT OUR FOLD OUT DESIGNS THAT HELP ELIMINATE SCRAP

MATERIAL AND APPLICATION CONSIDERATIONS

Duraco offers a wide range of foam materials to meet your application needs. These materials are used for environmental sealing, vibration isolation, sound dampening and shock resistance. Custom shapes, sizes and configurations are available for your specific design requirements.

NAME	MATERIAL	DENSITY (In.)	COMPRESSION DEFLECTION	COMPRESSION SET	OPERATING TEMPERATURE (°F)	THICKNESS RANGE (In.)	AVAILABLE COLORS	CERTIFICATIONS
------	----------	---------------	------------------------	-----------------	----------------------------	-----------------------	------------------	----------------

CLOSED CELL FOAM

XLPE	Cross-linked polyethylene closed cell foam	2 to 6	5 to 10	16 to 33	up to 215	.031 to .500	White, Black	Available in FMVSS3022 UL94 HF-1
PVC LOW DENSITY	Low density closed cell PVC foam	7	2	8 Max	-40 to 180	.125 to .500	Black	FMVSS302
PVC MEDIUM DENSITY	Medium density closed cell PVC foam	11	5	17 Max	-30 to 200	.063 to .500	Gray	FMVSS302
ECH	Closed cell Epichlorohydrin foam	15	3.5	2.5 Max	-40 to 300	.063 to .500	Black	FMVSS302
EPDM BLEND	Closed cell Neoprene/EPDM/SBR blended foam	4 to 11	2 to 9	40 Max	-40 to 200	.030 to 2.00	Black	UL94 HBF UL94 HF-1 FMVSS302
NEOPRENE/PVC/NITRILE BLEND	Expanded closed cell Neoprene/Nitrile/PVC blended foam	4 to 10	2 to 5	25 Max	-40 to 175	.125 to 500	Black	UL94HF-1 FMVSS302
VNN	Expanded closed cell Vinyl/Nitrile/Neoprene blended foam	5	4 to 6	40 Max	-40 to 200	.063 to 1.00	Black	UL94 V-0 UL94 HF-1 FMVSS302 FMVSS302

OPEN CELL FOAM

HYDEN	Open cell ester/ether Polyurethane foam	3 to 7	3	3 Max	-40 to 250	.375 to .625	Gray	FMVSS302
LOW DENSITY POLYURETHANE	Open cell Polyester/polyurethane foam	2,4,6	.4 to 1.2	15 Max	-	.125 to 1.75	Charcoal, Black	UL94HF-1 FMVSS302
LOW DENSITY POLYURETHANE, LOW PERMEABILITY	Open cell Polyester/polyurethane foam	2,5	.6	15 Max	-	.125 to 2.00	Charcoal	UL94HF-1 FMVSS302
PORON	High Density micro-cellular polyurethane foam	12 to 30	1.4 to 93	5 Max	-60 to 250	.063 to .500	Black	UL HBF FMVSS302

SPECIALTY

SILICONE	Open and Closed Cell Silicone foam	10 to 27	1.5 to 22	5 Max	-67 to 392	.031 to 1.00	Black, White, Gray, Red	UL94 V-0 UL94 HF-1 FMVSS302
SILICONE SHEET	Commercial Grade Silicone Sheet	50 Shore A 60 Shore A	n/a	n/a	-80 to 450	.031 to .125	Gray	UL94 HB
VOLTOID V-090	Electrical/Flame Barrier	65	n/a	n/a	n/a	.030	Gray	UL94 5VA UL 746 A (900°C) UL 746 C (140°C)

GENERAL PURPOSE BONDING

FOAM TAPES

Duraco's double-sided tapes are available in various thicknesses for bonding close fitting parts or irregular surfaces and gaps. Available choices include foam core, film, tissue or transfer tapes. These tapes offer quick attachment of components during the assembly process. Whether attachment is for fixturing between build stages or a permanent bond, Duraco has a solution for your needs.

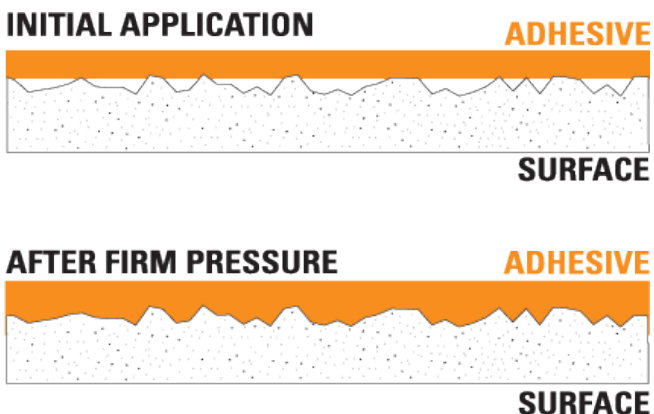
Properties

- Let us die-cut your custom part or choose from a wide range of pre-cut shapes and sizes
- Rubber or Acrylic
- Thicknesses from 1/32" to 2"
- White or Black
- Service Temp Range:
 - Rubber -20° to 150°F
 - Acrylic -20° to 175°F
- Holding Power: 1 lb. per 1 sq.in. of tape

Benefits of Foam Tape

- Greater surface contact on irregular surfaces
- Fills gaps
- Creates a flexible bond line
- Absorbs vibration
- Distributes stress

FOAM TAPE FILL GAPS



SUPPORTED AND TRANSFER TAPES

Properties

- Choose custom configurations or select from a wide range of pre-cut shapes, sizes or continuous rolls
- Finger Lift or Flush Edge available
- Various adhesive coating weights and film thicknesses are available
- Service Temp Range:
 - Rubber -20° to 190°F
 - Acrylic -20° to 275°F
- Options for low surface energy bonding
- Long rolls and spools are available for extrusions

Benefits of Film, Tissue and Transfer Tapes

- Maintain a close fit between parts
- Film and tissue resist stretching and tearing
- Improves aesthetics of bonded parts
- Will not drip, run or squeeze-out like a liquid adhesive
- Immediate fixture strength reduces WIP



DESIGN TIPS

- Foam tapes fill gaps and allow for efficient bonding of irregular surfaces
- Foam tapes can absorb shock and vibration while holding parts together
- Film tapes allow for minor adjustments and reduce stretching and tearing of the foam or adhesive
- Film or transfer tapes offer permanent bonding of close fitting parts while maintaining aesthetic integrity

STRUCTURAL BONDING

FEATURED PRODUCT

DURACO HIGH BOND®



Duraco High Bond (DHB) tapes are a high performance bonding that can improve the general quality and durability of your appliances. DHB tapes can isolate vibration and distribute stress, unlike mechanical fasteners. No special tool or equipment is needed to apply tapes. Tapes are easy to apply and offer a clean appearance. They also adhere to a comprehensive suite of appliances and can function as an environmental seal and preserve your appliances from air, moisture, dust and more.

Performance Characteristics of DHB

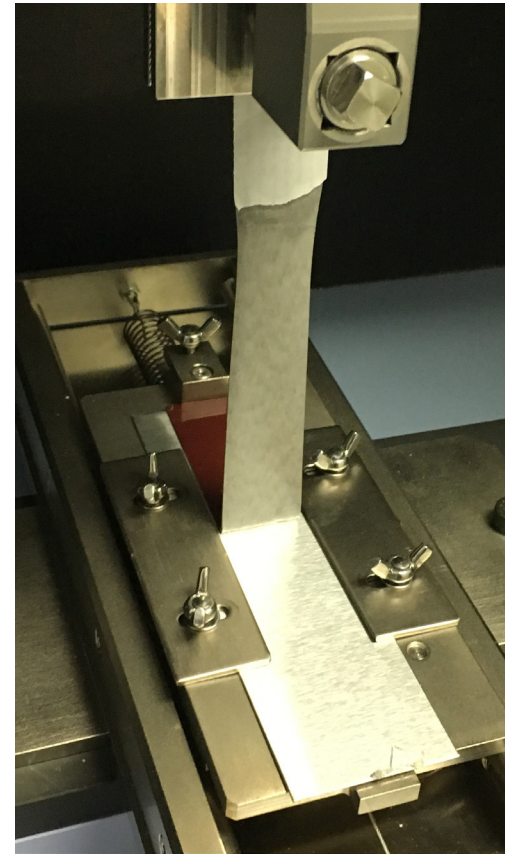
- A viscoelastic material that absorbs shock and vibration, prolonging the integrity of the joint
- Allows for thermal expansion of bonded substrates and reduces stress
- High load bearing capability with strong shear and tensile resistance
- Distributes load across the bond line unlike fasteners which isolate stress, leading to fatigue
- Provides an environmental seal, protecting your assembly from air, moisture, dust and more

AVAILABLE OPTIONS

- DHB is available in a wide range of thicknesses from .010" To .120"
- Available colors include clear, white, gray and black
- Choose from many standard width rolls, or allow us to make your custom widths and die-cut shapes
- Various DHB formulas are available for your specific needs including options for bonding low surface energy materials

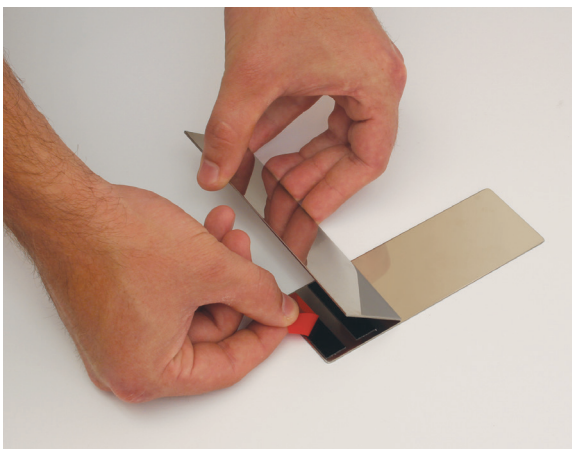


duraco.com | sales@duraco.com | 866 800 0775



Typical Applications

- Bonding dissimilar substrates including low surface energy plastics
- Structural components like hat channels and brackets
- Bonding trim and components in appliances
- Refrigerators, stoves, washers and dryers
- LCD instrument panels
- Bonding and sealing electrical components
- Seal and fixture hand assembly to glass
- Bonding button assembly
- Sealing and bonding light pipes



DESIGN TIPS

- Reduce weight in your design when using tapes in place of welds and mechanical fasteners
- Tapes will not rust or corrode like welds and metal fasteners.
- Use DHB tape to structurally bond dissimilar substrates like metals to composites
- DHB can be die-cut into countless shapes and sizes to fit your specific needs

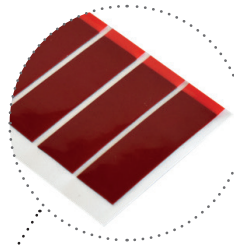
APPLIANCE APPLICATIONS

LAUNDRY PRODUCTS

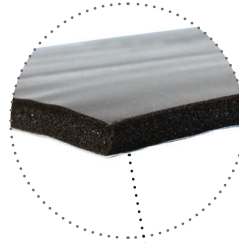


APPLIANCE APPLICATIONS

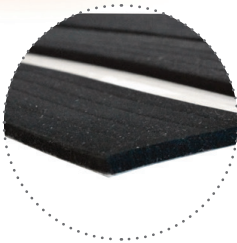
COOKING PRODUCTS



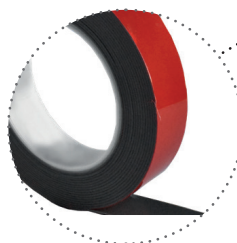
**DHB FOR BONDING
BUTTON ASSEMBLY**



**SOLID SILICONE
FOR VENT SEALING**



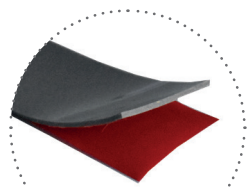
**HIGH TEMP FOAM
GASKET FOR AIR SEAL**



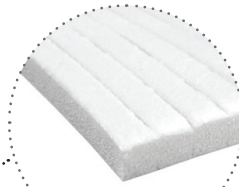
**DHB TO SEAL AND FIXTURE
HANDLE ASSEMBLY TO GLASS**

APPLIANCE APPLICATIONS

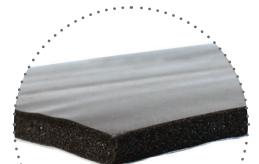
FOOD PRESERVATION PRODUCTS



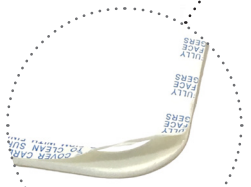
DHB FOR BOND AND SEAL TOUCH SCREEN



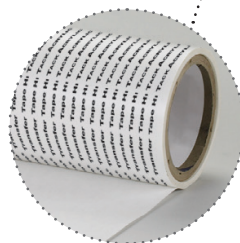
AIR TOWERS & DUCT WORK SEALS TO DIRECT AIR FLOW



SEAL COMPRESSOR HOUSING TO CONTROL NOISE



ICE MAKER & WATER DISPENSER SEALS



LAMINATING ADHESIVES FOR NAME PLATES

APPLIANCE APPLICATIONS

CLEANING PRODUCTS



DHB FOR SEALING CONTROL PANELS

ELECTRIC INSULATION TO PROTECT CRITICAL COMPONENTS

FLAME BARRIER FOR CONTAINMENT

SMALL APPLIANCES

As an industry leading provider of adhesive tapes, we can develop and manufacture a variety of tape solutions for smaller appliances.

Typical Applications

- Seal moisture and air
- Vibration damping
- Sound absorption
- Anti skid





Coat.
Convert.
Customize.

duraco.com | 866 800 0775 | sales@duraco.com



**TAPE
EXPERTS**



IN STOCK



**CONVENIENT
SERVICE**



**FREE
SAMPLES**



**CUSTOM
CONVERTING**