



Types of Felt

SAE Wool Felt

Architectural and Design Felt

Decorative Felts

Orthopedic Felt

Felt Wheels

Woven Felt

Synthetic Felts

SAE F-1 Pressed Felt

SAE F-1 is a hard-density white wool felt. It is suitable for oil retention where the felt is not compressed, for feeding low viscosity or light oil, and where unusual strength and hardness are required. Typical uses include washers, bushings wicks, door bumpers, polishing blocks, and parts where wear resistance to abrasion are required.

SAE F-5 Pressed Felt

SAE F-5 is a white high-grade felt of medium density recommended for precision uses where resiliency and durability are important factors. Typical uses include: lubrication wicks, grease seals, wipers, shock dampers, and dust seals.

SAE F-10 Pressed Felt

SAE F-10 is a white, high-grade, medium-to-low density felt, similar in quality to the SAE F-5, but recommended for uses where abrasion and wear are not important factors. This felt is used for fluid storage and delivery where the felt is confined and compressed in assembly, as well as resilient padding and plug filters for gas and air.

SAE F-15 Pressed Felt

SAE F-15 is a grey low-density felt with a wide range of uses where resistance to abrasion, durability and wear are not important requirements. Typical uses include: spacing strips; sound deadening; fuel oil filters; anti-rattle applications; and grease and oil retention.

SAE F-3 Pressed felt

SAE F-3 is a grey high-grade felt of slightly less density and durability than SAE F-1, but still recommended for precision uses such as: vibration mounts; precision lubrication wicking; oil seals; bumpers; gaskets; automobile, aircraft, and machinery components.

SAE F-7 Pressed Felt

SAE F-7 is a grey medium-density felt similar to SAE F-5 and recommended for similar applications, but where slightly less durable material is permissible. These felts are commonly used for grease retainers, spacer strip seals, weather stripping, dust shields, and noise reduction linings.

SAE F-13 Pressed Felt

SAE F-13 is a grey low-density felt with a wide range of uses where resistance to abrasion, durability and wear are not important requirements. Typical uses include: spacing strips; sound deadening; fuel oil filters; anti-rattle applications; and grease and oil retention.

SAE F-15 Needled Felt

SAE F-15N is a grey low-density needle-punched felt recommended for non-mechanical applications when retained between other materials. It is often used for packaging, crating, and lining applications, where a lower grade felt is acceptable.

SAE F-26 Needled Felt

SAE F-26N (like F-15N) is another grey low-density needle-punched felt recommended for non-mechanical applications when retained between other materials. Padding and lining are typical uses.

SAE F-50 Pressed Felt

SAE F-50 is a white, high-grade, high density felt similar to SAE F-1, but made in thicknesses below 1/8". This felt is recommended for mechanical applications where an accurate, thin, smooth, high grade felt is required. Typical uses include ball and roller bearing oil retainer washers and small dust excluding washers.

SAE F-51 Pressed Felt

SAE F-51 is a high grade, high density felt similar to SAE F-3, but made in thicknesses below 1/8". This felt is recommended for the same applications as SAE F-50, but where tolerances and lengths of life are not as important. Typical uses are thin-cut parts such as gaskets and liners.

SAE F-55G Pressed Felt

SAE F-55G is a grey medium-to-low density felt similar to SAE F-7, but made in thicknesses below 1/8". This felt is recommended for uses where high durability is not required, such as anti-squeak strips and sound deadening when glued to panels.

SAE F-55B Pressed Felt

SAE F-55B is a black medium-to-low density felt similar to SAE F-7, but made in thicknesses below 1/8". This felt is recommended for uses where high durability is not required, such as anti-squeak strips and sound deadening when glued to panels.

S.A.E Felts



100% wool felt is divided into two broad classifications— SAE felt and technical felt. SAE felt is available in rolls or sheets.

Engineers and designers specify felt for numerous and various reasons and applications including vibration absorption, noise reduction, bearing strength, sealing, wicking or fluid transmission, lubrication, roller bearings, filters, heat barriers, bumpers, components, liners, retainers, shock absorbers, weather seals, dust shields, anti-squeaking, insulation, padding, plugs, packing, polishing (glass, stone, jewelry, fiberglass metals, plastics, etc.), furniture rubbing and staining, burnishing, pen nibs, lamp bases, legging, sleeves, and countless others.

Note: the following information is intended to as a basic introduction to the S.A.E. pressed felt grades with some suggested uses. For detailed technical specifications, please consult the information accessible from the cascade on the main navigation menu or by clicking on the S.A.E. identifiers below. We can provide additional information and practical experience applications once we are familiar with your specific situation.

S.A.E. F-1 is a white, hard-density felt. It is suitable for oil retention where the felt is not compressed, for feeding low viscosity or light oil, and where unusual strength and hardness are

required. Typical uses include washers, bushings wicks, door bumpers, polishing blocks, and parts where wear resistance to abrasion are required. This product is priced per linear foot.

S.A.E. F-2 and F-3 are high-grade felts of slightly less density and durability than SAE F-1. These grades are recommended for vibration mountings and the same general purposes as F-1 but where a felt of slightly lower quality is adequate.

S.A.E. F-5, F-6 and F-7 are high-to-medium grade felts recommended for precision uses where resiliency and durability are important factors. SAE F-7 can be used in applications similar to those for F-5, but where slightly less durable material is permissible. These felts are commonly used for grease retainers, spacer strip seals, weather stripping, dust shields, and noise reduction linings.

S.A.E. F-10 and F-11 are high-grade, medium-to-low density felts, similar in quality to F-5, but recommended for uses where abrasion and wear are not important factors. These felts are often used for grease and oil retention (where the felt is confined and compressed in assembly), dust shields operating under less severe conditions, as well as for plug filters for gas and air.

S.A.E. F-13 and F-15 are low density felts with a wide range of uses where resistance to abrasion, durability, and wear are not important factors. Typical uses include: sound deadening; chassis strips; spacers; dust shields; pedal pads; dash liners; fuel oil filters; anti-rattle applications; grease and oil retention.

S.A.E. F-26 is suitable for packing and padding when held in place between other materials. This grade should not be used for mechanical purposes.

S.A.E. F-50 is a high-grade, high-density felt similar to SAE F-1, but produced in thicknesses below 1/8". This felt is recommended for mechanical applications where an accurate, thin, smooth, high-grade felt is required. Typical uses include ball and roller bearing oil-retaining washers and small, dust-excluding washers.

S.A.E. F-51 is a high-grade, high-density felt similar to F-3, but produced in thicknesses below 1/8". It is recommended for the same general uses as F-50, but in installations where tolerances and length of life are not as important. It is typically found in thin cut parts such as gaskets and liners.

S.A.E. F-55 is a medium-to-low density felt similar to SAE F-7, but made in thicknesses below 1/8". This felt is recommended for uses where high durability is not required, such as anti-squeak strips and sound deadening when glued or cemented to fiber board or metal panels.

Woven Felt

Because of consistency of thickness and superior "bendability," woven wool felts should always be a consideration. Numerous types and grades are available for specific applications. Beyond these are hundreds of variations that can be engineered for your needs.

Woven wool felts are generally the better product choice when "flexibility with density" is the key phrase. For example, a piece of woven felt (WF-1 that's 1/4" thick [Mfg. #1955H]) and a piece of pressed SAE F-1 of similar size, bent at a severe angle--90° or more--will reveal how much easier the woven product can be bent and how much more readily it snaps back without distortion. When you consider that WF-1



Pool table surfaces are one common application for woven felt.

weighs nearly 25% more than pressed felt, you can understand one of the superior properties of woven wool felt.

Close tolerance capability is another prime consideration in the choice of a woven felt. Woven felt tolerances are one half the tolerances of pressed felt, and for precision requirements can be held even closer than the published tolerances.

Wool felt is frequently used as a wicking agent for a wide variety of liquids, and this is another instance where woven products will make a better choice. Visual magnification of the fibers comprising pressed and/or needled felt compared with woven felt clearly reveals the intricate weave within the woven product. The weave greatly increases the tensile strength and reduces the chance of splitting. Consequently, in almost every application for wicking, woven wool felt will outperform pressed counterparts. Since there are so many variables in wicking, only testing can provide a final answer.

Finally, resiliency is another key factor for woven felt. All wool felts are resilient because of the very nature of wool itself. But in most cases, woven felts will retain this resiliency much longer than pressed felts.

Synthetics, Plushes, Velvets & Blends

Natural wool felt is an unparalleled material. But there are rare times when a synthetic product might be a better choice, especially when cost is a major consideration. Below are descriptions of some of the synthetic and blend products available.

Polyester

Southeastern offers converted polyester products ranging from 1/16" to 1 1/2" thick. Distinguishing features include:

- Withstands temperatures from 200° F to 550° F.
- Outstanding mildew resistance
- Unaffected by aging
- Good chemical resistance including high tolerance to bleach

Typical Applications: Air filters, impregnated substrates, seals, wicks, moisture pads, metal wiping, liquid filtration, and gaskets.

50/50 Wool-Polyester

Wool and polyester fibers are blended together then needle punched to form a product similar to SAE felts. Additional properties are obtained and it is very economical.

Typical Applications: Gaskets, wicks, dust shields, oil & grease containers, bumpers, bearing seals, ink rolls, dryer drum seals, and padding.



Plushes

Pile fabrics are a combination of natural & synthetic fibers. A wide variety of pile types, height, and configurations is available.

Typical Applications: Gaskets, wipers, light seals, roll covers, lint brushes, directional belts, litho plate cleaners, etc.

Grip Tape

A unique non slip covering for textile and other rolls. This plush material impregnated with a rubber-like compound provides outstanding traction ability. Available in lengths ranging from 200 to 250 feet, and in standard widths of 2", 3", and 56". Two grades are available.

Typical Applications: Textile roll covers.

Velvets

Available in a wide range of contemporary and traditional colors. Pleasing to the touch and the eye, velvet can be engineered to many configurations.

Typical Applications: Display case liners, light seals, cushions, anti-squeak, anti-rattle.

Some of the identified uses for felt

If you accept the premise that felt is one of the most versatile materials in existence, you'll understand the limitations of this page of our website. That being stated, below is a list of hundreds of current applications for felt.

Absorbers

Acid Resistant Packing
Acoustical Materials
Adhesive "Dots"
Air Compressor Lubricators
Air Fresheners
Alphabet Letters
Anti-squeak Strips and Pads
Apparel
Appliance Parts
Applicators
Athletic Letters
Athletic Pads
Automobile Parts

Ball Bearing Strips

Banners
Base Padding
Bass Drum Beaters
Bearing Pads
Beater Balls
Beveled Laps
Billiard Cloth
Blankets
Bobs
Brushes
Buffing Felt
Bumpers
Burnishers

Cabinet Bumpers

Capillary Mats
Card Table Pads
Carpet Pads
Carrier Heads
Chalkboard Erasers

Gaskets

Glass Polishing Felt
Glass Protectors
Grain Mill Seals
Granite Polishers
Grease Retention
Grinding Felt
Griptape
Gun Butt Pads
Gun Cleaners

Handicraft Felt

Hangers
Helmet Liners
Horse Collars
Horse Leg Wraps
Impregnated Felt
Industrial Wipes
Ink Feed Felts
Insoles for Shoes
Insulation
Ironing Felts
Isolators

Jeweler's Felt

Kiln Insulators
Knee Pads
Knife Edge Felts

Laminated Felt

Lamp Bases
Lapidary Felt
Lapping Felt
Laps
Leveling Pads
Letters (Die-cut)

Pool Table Felt

Precision Seals
Pressure Sensitive Felt
Printers' Felt
Protective Pads

Quake Absorbers

Quilting Felts

Ring Buffs

Rings
Roll Felt
Roller Bearing Seals
Roller Felt
Rubbing Blocks

Saddle Felts

SAE Felts
Sander Platens
Satin Finish Bobs
Satin Finish Wheels
School Supplies
Scratch Removers
Seals
Seamless Felt Belts
Shaped Felt
Sheet Felt
Shims
Shock Absorbers
Silversmith Buffs
Sleeves
Smoke Generators
Spacers
Spill Absorption
Spilt Laps
Stain Applicators
Stainless Steel Polishers

Chamois Buffs
 Channel Felt
 Chassis Strips
 Chisel Honing Felt
 Clamp Cushioning
 Cones for Polishing
 Construction Felt
 Covers
 Crafts
 Cushions
 Cutlery Box Liners
 Cylinder Felt
Dash Liners
 Deburring Felt
 Dental Felt
 Deodorizer Wicks
 Die Maker's Felt
 Discs
 Door Seals
 Dots
 Drum Beaters
 Dryer Seals
 Dust Filters
 Dust Seals
Elbow Pads
 Electrical Felt
 Embossing Felt
 Engineered Parts
 Engraver's Felt
 Equestrian Felt
 Erasers
 Etching Felt
Feet
 Filters
 Flags
 Flame Resistant Parts
 Flexible Parts
 Fluid Transfer
 Fuel Oil Filters
 Furnace Insulators
 Furniture Pads
 Light Seals
 Liners
 Lithographer's Felt
 Locomotive Lubricators
 Lubricating Felt
Machine Oilers
 Mallets
 Marble Polishing Felt
 Marker Tips
 Mechanical Felt
 Medical Felt
 Metal Felt
 Military Spec. Felt
 Miniature Split Laps
 Mirror Polishing
 Mold Polishing Felt
 Motor Mounts
 Musical Instrument Felt
 Muslin Buffs
Nibs
 Noise Barriers
Oil Filters
 Oil Seals
 Oil Skimmers
 Oil Wicks
 Oilers
 Orthopedic Felt
 Oven Insulators
Packing Felt
 Padding
 Pads
 Pen Nibs
 Pennants
 Percussionists' Pads
 Piano Felt
 Pipe Covering
 Pipe Hanger Felt
 Plastic Polishers
 Plugs
 Plush
 Pneumatic Tube Seals
 Polishing Felt
 Stamp Pads
 Steel Mill Wipers
 Strainers
Table Top Pads
 Tannery Felt
 Tape
 Technical Felts
 Toys
 Traction Rollers
 Transmission Felts
 Trophy Bases
 Tube Felt
 Tumbling Media
 Tympani Beaters
 Typewriter Pad Felt
Unmounted Felt Bobs
 Unmounted Felt Buffs
 Unmounted Buffs
 Upholstery Felt
Vacuum Felt
 Vibration Pads
 Vibratory Finishing Media
Wall Panels
 Washers
 Weather Stripping
 Welding Pads
 Wet Process Felt
 Wheels
 Wicks
 Wiping Strips
 Wood Hub Brushes
 Wood Rubbing Pads
 Wood Stain Applicators
 Woodworking Tool Polishers
Xerography Light Seals
 Xylophone Bed Felts
Yard Goods
 Yoke Pads
 Yuletide Decorations
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