

WONDERFLEX™ Frequently Asked Questions...

- **What is WONDERFLEX?**

WONDERFLEX is an extruded thermoplastic composite sheet. It is comprised of a unique synthetic polymer that when heated in the range of 150-170 degrees Farenhight (70-80 degrees C), will soften and activate a built in adhesive for molding and forming. A layer of polyester open weave scrim is located on both the top and bottom surface for strength, reinforcement and stability.

- **What can WONDERFLEX be used for?**

It is truly only “limited by your imagination”. Theatrical scenery and set designs, various props, costumes, animatronics, crowns, helmets and headgear, puppetry, armor, masks, prototypes, modeling, mascot heads, displays, headdresses etc. etc. even taxidermy, custom interior auto repair, furniture restoration and as a quick repair patching item like duct tape.

- **Who uses WONDERFLEX and where has it been used?**

Artists, sculptors, prop masters, set designers, costume makers, hat makers, mask makers, special effects persons and the like, have all discovered the wonders of WONDERFLEX. From high school and college theatres to Broadway to Hollywood, the use of new applications continues to grow. Successfully used in major theme parks worldwide, museums, opera houses, Halloween and haunted house attractions, Las Vegas venues, trade shows and special events.

- **How big are the sheets?**

WONDERFLEX sheets are available in one size. These are large sheets measuring 43 inches by 55 inches.

- **How thick or heavy is WONDERFLEX?**

Thickness is about .038 inches (.98 mm) or a little less than 1/16 of an inch. Each full size sheet only weighs about 3 to 3 ½ LB’s. WONDERFLEX is really tough and versatile, so you can staple it, screw it, bolt it or drill it.

- **Is WONDERFLEX available in any other weights or thicknesses?**

No, the current standard product is WONDERFLEX SUPER WHITE. If you require more thickness, WONDERFLEX can be built up using heat and pressure to bond several layers together, for more structural support, stiffness or thickness.

- **Is WONDERFLEX available in colors?**

Although the original WONDERFLEX was a bluish green color, it is now available in the universal preferred color of white.

- **Does WONDERFLEX replace other materials?**

Most projects are of course unique and case specific with design and build phases critical to the end result. WONDERFLEX is desirable for long lasting and durable items and oftentimes the material of choice over fiberglass, sculptured Styrofoam, paper mache etc. WONDERFLEX can be used in conjunction with these or other materials such as FOSSHAPE™ as well.

- **Is WONDERFLEX the same as “Celastic”?**

Although the end result after working with WONDERFLEX is similar, it is much safer and easier to use, since no nasty solvents are required for activation, just heat. WONDERFLEX is often referred to as the “celastic replacement”

- **Do I need any special tools for cutting WONDERFLEX?**

No, a good pair of sharp scissors or utility knife work fine.

- **How do I activate WONDERFLEX to make the shape and form I want?**

A wide variety of heat sources maybe used depending on the size of the craft or figure you are building. Hot water, conventional ovens or even a microwave oven all work fine. Most users prefer working with an industrial hot air gun with a flowing motion.

- **How much time do I have to work with WONDERFLEX after I heat it up before it cools off and becomes rigid again?**

You have about 2-3 minutes of work or open time before it cools off and reverts back to its original stiffness. If you find it is becoming difficult to mold and shape as it cools off, just reheat. WONDERFLEX can be heated again and again.

- **Can I work with my bare hands and fingers with the heated WONDERFLEX?**

Although the WONDERFLEX when heated activates the built in adhesive, the adhesive does not readily transfer on to your fingers. Some people work with their bare hands for the best dexterity, but you must be careful not to burn yourself and may want to consider wearing tightly fit, insulated gloves, especially when working larger structures or over longer time periods.

- **Can WONDERFLEX be used with positive and negative molds?**

Yes, as it is well suited for both, as well as free forming. Use conventional molds or create you own. If sticking to the mold surface is a problem, you may want to utilize a layer of aluminum foil or spray on a non-stick release agent treatment like “Pam” non-stick cooking spray etc. Depending on the mold configuration or size, you may want to cut the WONDERFLEX into smaller pieces or strips making seams using heat and applied pressure.

- **Is WONDERFLEX waterproof?**

Yes, cool water has no effect and its OK if it “rains on your parade”. You can even use WONDERFLEX to build structures to hold water using proper seaming methods.

- **Will the heated WONDERFLEX stretch?**

Yes, primarily in the bias direction, due to the reinforcing polyester scrim support. Use the stretch factor of the heated WONDERFLEX to your advantage to enable you to work in finer detail.

- **Can I achieve fine detail and delicate contours using WONDERFLEX?**

With a little time, patience and experience the use of WONDERFLEX is truly “limited by your imagination”. Use traditional sculpting tools, a wooden tongue depressor or whatever, to work more intricate areas. An ice bag or gel cold pack may help in speeding up the setup time or keep a newly formed area in tact while working an adjacent area with your hot air gun. Use a soldering iron or a hot glue gun as your heat source tool without the glue stick for working small confined areas and for seams.

- **Is WONDERFLEX suitable for outdoor applications?**

Although some discretion is advised and every creation is case specific with respect to permanent placement, WONDERFLEX has been successfully used in outdoor theme parks and the like. In most applications use of proper coatings and paints will adequately help insulate and protect the WONDERFLEX from the sun.

- **Can I apply heated WONDERFLEX directly on the human body for forming or mask making?**

Absolutely not, the hot WONDERFLEX will burn.

- **Is WONDERFLEX fire retardant or have an FR rating?**

No, it will eventually burn if exposed to an open flame long enough in its raw form or untreated state. Various flame-retardants available on the market can be used to cover or coat WONDERFLEX. Check your local fire regulations and confer with your local fire marshal regarding your specific application and requirement.

- **How do I decorate or finish the surface of WONDERFLEX?**

WONDERFLEX readily accepts most artisan paints and coatings. Acrylics, latex etc. brush applied or spray-painted. Foam coats, sculpt coats, gessos or most any artisan coating can be applied depending on the desired effect. Cover with decorative fabrics by applying spray adhesive or use hot glue.

- **What about the storage of finished WONDERFLEX based items?**

Since WONDERFLEX is a thermoplastic it will soften when exposed again to the 150-170 degree F temperature range, so use prudence in your selected storage location. Finished items should not be stored in outdoor metal storage trailers in direct sunlight or in the trunk of your car in summer months where activation temperatures maybe reached.