

Stokbord® Sheet



User Guide

Multi-purpose recycled plastic
board for bespoke applications

Designed and manufactured by



Redefining damage prevention with recycled plastics

Centriforce Products Limited
14-16 Derby Road, Liverpool, L20 8EE

+44 (0)151 207 8109
sales@centriforce.co.uk
www.centriforce.com



Stokbord® Sheet is a versatile and durable plastic board which is ideal for fabrication and packaging applications. Made from 100% recycled plastic, it can be used instead of more costly virgin plastics and other materials.

Offering excellent value for money and proven over many years, Stokbord® Sheet can easily be fabricated by routing, cutting and shaping.

Stokbord® Sheet can be used for:



Protective packaging



Materials handling



Barriers



Trailer lining and flooring



Pallet bases and stillage



Outdoor furniture

Stokbord® Sheet is available from stock in the following options:

			THICKNESS				
COLOUR	SIZE		3mm6	mm	9mm1	2mm1	8mm
Grey	2440mm x 1220mm	Approx 8ft x 4ft		✓	✓	✓	
Black	2440mm x 1220mm	Approx 8ft x 4ft	✓	✓	✓	✓	✓
Grey	3000mm x 1500mm	Approx 10ft x 5ft		✓	✓		
Black	3000mm x 1500mmA	pprox 10ft x 5ft		✓	✓	✓	

Many other colours and sizes are available, subject to minimum order quantities.

Users must establish for themselves if the material is suitable for their intended application. No liability will be accepted for loss or injury from the use of Stokbord® Sheet for unspecified purposes. Our policy is one of continuous improvement. We reserve the right to modify the specification without notice at any time.

Using & Installing Stokbord® Sheet

Stokbord® Sheet can be used for countless applications. It can be sawn, drilled and CNC routed using typical wood working tools and machinery

Whilst not usually recommended, many fabricators have successfully glued Stokbord® Sheet using special adhesive systems. For bonding Stokbord® to Stokbord®, we recommend 3M Scotch-Weld® Structural Plastic Adhesive DP-8010/DP-8010NS or equivalent. Please contact us for more information. Stokbord® Sheet is weldable, however this may require the use of specialist machinery and equipment. More detailed

Important information:

Please note that Stokbord® Sheet is manufactured from 100% recycled low-density polyethylene. As with all plastics, it is susceptible to thermal expansion and contraction with temperature changes. Allowances for thermal movement must be incorporated into design when using Stokbord® Sheet as a fabrication material to prevent warping and buckling. Thermal expansion rates can be found in the Specification Technical Data Sheet. Recycled plastics are never completely pure materials and contamination is possible from other types of plastics and even other materials such as paper. Centriforce Products cannot, therefore, guarantee the success of all welding methods.

Working with the material

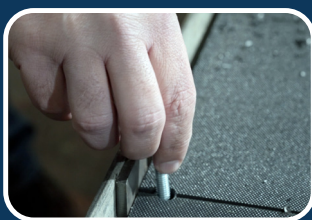
Stokbord® can be worked using similar equipment to traditional wood. It can be Sawn, drilled and CNC routed using typical wood working tools or machinery with good results. Circular saws and band saws work well with Stokbord®, but slower speeds are normally recommended to avoid friction heating. Similarly wood and even metals drills can be used, but again slower speeds are suggested.

Routing is straight forward with Stokbord® and the sheet can be cut into quite complex shapes using tungsten carbide heads. It can also be profiled into complex shapes and will give a good edge.

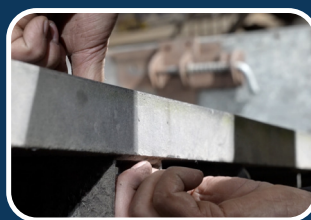
In fixing Stokbord® to other structures or walls, it is advisable to condition the sheet for around 24 hours at ambient temperature, ideally in the environment it will be used. Where possible, try to fix the sheet at or near maximum operating temperature.



Best results can be achieved by:



Preferably cut a slot into the board to allow horizontal movement. Fix and cover the slot with a bolt and washer arrangement



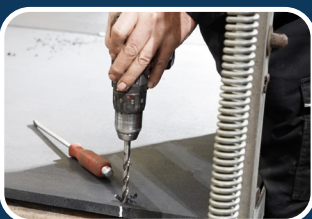
Try to install Stokbord® sheet by fixing from top to bottom. This allows the board weight to take the form of its supporting structure.



Ensuring sufficient space is left between adjoining boards to allow for thermal expansion. H-section joining strips can be used to mask the space and create a professional finish.



Avoid countersunk screws and do not over tighten. Allow some room for expansion. Use round headed screws if possible.



Alternatively, pre drill holes before installation and oversize any holes by a minimum of 2mm in relation to the size of fixings.



Do not use nails to fix Stokbord® sheet.

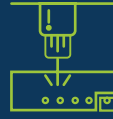
Welding Stokbord® Sheet



Successful welding of recycled plastic sheet is perfectly feasible



Joints should be clean and well supported



Extrusion welding is the preferred method



Weld rods/filler should be the same material as the plastic sheet.

Using & Installing Stokbord® Sheet

We usually recommend that the joint surfaces be as clean as possible and free from any surface oils or other contamination. Sheets should be carefully supported to keep the joint stable during welding and to allow sufficient time for cooling or freezing to occur.

Welders will often preheat the joint with the weld gun before introducing the filler material. This allows the operator to gauge the required weld gun tips, temperatures, pressures and speed. It also provides an initial amount of molten material from the sheets which will help hold the joint in place.

Application of the right heat and pressure

There are many types of welding machines available, but experience has demonstrated that, with recycled plastic sheet, extrusion welding machines* achieve a more reliable and consistent weld performance.

Hot air guns cannot consistently deliver the same amount of heat, pressure and molten material to the joint surface and may not provide a secure weld. For this reason, hot air bonding (or tack welding) machines are not generally recommended for welding recycled plastics.

***Note: Available from Munsch, Leister and other good manufacturers. Details available on request.**

Weld rods/fillers

It is generally accepted that weld rods should be made from the same material or polymer as the sheets or boards to be welded. Due to the variability of recycled plastics, it may be difficult to obtain an exact match to the Stokbord® sheet. However, it may be possible to arrange for weld rods to be cut from Stokbord® sheet, if these are ordered at the same time as the sheet. (Please contact Centriforce at time of order if you wish to obtain weld rods from the same polymer blend).

Alternatively, it is possible to obtain weld rods from third parties. It is strongly recommended that weld rods should be the same polymer as that used in Stokbord®.

As an example, weld rods prepared from Rochling or Simona are widely used in industry and are readily available from plastic stockists.

Correct gun tips for recycled materials

As stated previously, 'hot air' or 'tack welding' is not recommended for welding recycled materials because of the difficulty in achieving a consistent, high performance weld when feeding the weld rod by hand. Extrusion welding is the preferred welding technique, as it is known to deliver more consistent weld joints. Consult the weld gun manufacturer's guidelines for initial recommendations of suggested settings for each polymer, and then gauge weld strength from a trial run.

For more information email info@centriforce.co.uk or call our Customer Service Team on 0151 207 8109.

Users must establish for themselves if the material is suitable for their intended application. No liability will be accepted for loss or injury from the use of Stokbord® Sheet for unspecified purposes. Our policy is one of continuous improvement. We reserve the right to modify the specification without notice at any time. Stokbord® Sheet is manufactured from post-consumer and post-industrial recycled plastic. This means that there can be some variability in product performance and within finish and colour uniformity. The degree of variability is controlled by our ISO 9001 Quality Assurance scheme. All plastics are susceptible to thermal expansion and contraction with temperature changes. **For more information, please refer to the relevant Technical Data Sheet for this product.**



Certification ID
10061212 for ISO9001
10118909 for ISO14001
10005533 for OHSAS18001

Designed and manufactured by



www.centriforce.com

The information contained in this leaflet is correct to the best of our knowledge. Users must establish for themselves that the products they are using are suitable for their specific projects. Centriforce Products Limited will accept no liability for any loss or injury resulting from the use of its products or materials.

CPL/SBSF&PUG