



Recycling & Reuse of old Styroblock containers

Forest nurseries across North America have steadily accumulated an unwanted volume of obsolete, retired, old Styroblock containers. Disposal has become a concern and readily available means have been exhausted – there is only so much need for bench supports!

Whatever you do, be aware of the nature of the material:

Polystyrene was accidentally discovered in 1839 by Eduard Simon, an apothecary in Berlin. From distilling the resin of Liquidambar orientalis. In more recent times the same polymer is made from petroleum (> benzene) and natural gas (> ethylene) by the chemical industry. Expandable polystyrene is produced by introducing a volatile blowing agent which causes the polymer to expand when heated. **CFC's* are no longer used.**

Styrene, used in the manufacture of EPS, occurs naturally in many familiar products including coffee beans, beer, wine, strawberries, nuts and cinnamon.

DO NOT burn old Styroblock containers in an open fire. Burning without sufficient oxygen (backyard burning), will give off soot (carbon black – as used in toner cartridges and car tires) and give you a bad reputation.

You have already reduced your impact on the environment by reusing Styroblock containers, for their original purpose, for so long. Careful handling, use and storage give the greatest benefit.



THE OBELISK TOWER, COQUITLAM, B.C. – LANDSCAPING BY TERRA DESIGN INC.



A name you can trust

Since 1967 Beaver Plastics has been producing high-performance, engineered products made from expanded polystyrene. Our products are used in the horticulture, silviculture, construction and packaging industries. Widely recognized as the quality leader in all our markets, Beaver Plastics was the first manufacturer of expanded polystyrene products in North America to achieve ISO9001 certification.

Contact us today for more information.

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Styroblock™ container recycling solutions



propagation tray manufacturer



THE OBELISK TOWER, COQUITLAM, B.C. – LANDSCAPING CONSTRUCTION BY TERRA DESIGN INC.

Reuse

Using an object or material again, either for its original purpose or for a similar purpose, without significantly altering the physical form of the object or material.

Programs of assistance may exist in your area e.g: <http://www.ciwmb.ca.gov/Reuse/Grants/default.htm>

Many Styroblock containers are reused for 10 years in growing tree seedlings but eventually become redundant (stocktype advances) or unusable in growing.

Styroblock containers are recognized as lightweight, rigid, stable in contact with soil and moisture, exhibiting thermal insulation and designed in modular sizes with a range of drainage holes – all properties that can be exploited for a wide variety of reuse.

■ **Weeping tile** – buried against the outside of a basement to provide both insulation to the basement and drainage to the weeping tile.

■ **Light fill** – in new housing construction on non-preloaded unstable sites where conventional fill may cause subsidence.

■ **Terrafill** – old Styroblock containers can be sold as Terrafill, specified in Green Roof landscaping to reduce loading and avoid slumping. This is the preferred Zero Waste solution.

Recycling

Using waste as material to manufacture a new product. Recycling involves altering the physical form of an object or material and making a new object from the altered material. Recycling is not waste prevention, because only waste can be recycled

Options:

Manufacturer Programs

■ **Beaver Plastics Ltd. has developed a process for recycling waste Styroblock containers into Styrogrit™ seed cover.**

The process can be completed at the nursery if sufficient blocks are accumulated. Styrogrit seed cover can be stored indefinitely. One cubic foot of seed cover can be produced from about 25 Styroblock containers (SB112/105ml). Styroblock containers do not have to be washed.

Styrogrit seed cover is an inert product made from expanded polystyrene. Key characteristics include:

- More mycorrhizae on the plugs
- Bulk density of 30 lbs/ft³ (compared to 92 lbs/ft³ for stone grit)
- Angular particle shape. Consistent particle size
- Non-porous
- Dust-free for easy handling
- Durable – stands up to irrigation, does not break down through the growing season



SUPERIOR ALTERNATIVE TO STONE GRIT

■ **Beaver Plastics Ltd. developed a machine that reduces Styroblock containers to Styrolite™ Media Amendment** by dado-saw. The process has been adapted for use in the nursery. Styrolite media amendment can be stored indefinitely but is bulky – one cubic foot of Styrolite media amendment can be produced from 0.7 Styroblock containers (SB112/105).



BILL BOERBOOM OF MOUNTAIN VIEW GROWERS INC., SUMMERLAND BC, USES AN OLD CORN GRINDER TO PRODUCE STYROLITE MEDIA AMENDMENT ON SITE.



RON BOERBOOM LIFTS A STYROLITE BAG – THE BAG IS MADE ON SITE WITH GROUND COVER – FILLED FROM THE CORN GRINDER DISCHARGE PIPE.

Call our specialists to discuss how to reuse or recycle Beaver Plastics Superblock trays.
Call Toll Free: **1-888-453-5961** or visit our web site at **beaverplastics.com**