

## materials used in nature squared products

**eggshell** Eggshell and natural lacquer are traditional decorative materials in East Asia. We preserve the original technique of hand applied and hand polished eggshell and lacquer. 8 layers of natural lacquer are applied to the substrate, each layer dried and polished. Then the eggshell is inlaid in a layer of wet lacquer. Another 10 layers of lacquer are applied, dried and polished. The form and pattern of the eggshell result from different methods of working the eggshell. The eggshell may be toasted over a coal brazier for different shades of brown; it may be inlaid concave or convex; and it may be crushed, separated, chopped or sprinkled. The lacquer may be coloured and textured to give different effects and depths. The combinations of these techniques give endless possibilities.

**mother of pearl** Mother of Pearl is a traditional decorative material in Vietnam. The pieces are hand cut from pearl oyster shells. We preserve the original technique of hand applied and hand polished Mother of Pearl and natural lacquer. 8 layers of lacquer are applied to the substrate, dried and polished. Then the Mother of Pearl pieces are inlaid in a layer of wet lacquer. Another 10 layers of black lacquer are applied, dried and polished. The Mother of Pearl is selected and cut from different parts of the shell for colour variation and degrees of opalescence. The form and pattern of the Mother of Pearl come from this selection and cutting process.

**natural lacquer** The lacquering technique was first developed in China in the 4th century BC. Lacquer comes from the resin of the Asian Sumac (*Toxicodendron vernicifluum*). The tree is widely distributed in East Asia, as far south as Vietnam. The resin is harvested, like rubber latex, by cutting into the bark of a lacquer tree and collecting the caramel-coloured liquid resin as it flows. Its active ingredient, urushiol, is also found in other tree species like the cashew nut and mango. The resin is applied as a thin coating over a wooden substrate. It undergoes a chemical hardening process, that is best done in conditions of high humidity and temperature. Once dry or "cured", the coating is then hand polished. This is repeated 8 times. Then the paint effect is applied with lacquer that has been coloured with natural mineral-based pigment. After this layer is dry, a further 9 layers of lacquer are applied. The warm brown tone of the final product comes from the natural colour of the lacquer on top of the lighter pigment of the gold paint effect.

**vines, twigs and grasses** These materials are all fast growing and abundant in their natural environment. Several of these materials are used by indigenous people for shelter, hammocks and baskets. The raw materials are dried in the sun then sorted, cleaned and cut for inlaying. We inlay the vines onto the substrate. A layer of resin is applied. Once dry, the surface is sanded so that the upper layer of the vine, twig or grass is removed and the internal structure is revealed. For a relief effect, the inner vessels are stripped out. For a sealed smooth effect, another layer of resin is applied, and the drying and sanding cycle repeated.

**leaves, fruits and fibres** The leaves, fruits and fibres in our surfaces are diverse in origin. We have selected them either because they are a cultivated crop with declining markets, like kapok and tobacco, or they are unused parts of a food crop, like banana bark or coco shells. We gather, sort and clean the raw materials. They are stripped, cut or pressed to provide a flat surface for inlay. Each piece is inlaid and laminated by hand. The pieces are often of uneven thickness and veins or dense fibres require careful lamination. The colour variation can be extensive within a piece, for example in banana bark or abaca; by season, as with tobacco leaves, or with plant age, as with gugo. This is part of the natural beauty and individuality of each piece.

**shells** Most of our shells come from molluscs that are harvested for food in coastal communities (hatchet shell, troca shell). Instead of discarding them, we encourage their collection and cleaning for inlay. This supplements fishing incomes. Some shells have traditional decorative value (capiz, abalone). Where this is the case, we are conscious of the risk of over-harvesting and aim actively to manage this. The shells are inlaid and left unsealed so that their natural pearlescence is unspoiled. We enhance the beauty of the shell by various methods: selecting for colour, cutting in different shapes, cracking and crushing.