BUILDING REUSE, REUSE IN BUILDING
NOVEMBER 02, 2020

Collection Description:

Through the exhibition of select building materials and components, the Building Reuse, Reuse in Building collection aims to showcase how design practitioners and builders can integrate materials that may live multiple lives, into their work. By doing so we can help to offset the negative impact that manufacturing, building construction and building demolition has on our planet. In this collection we will introduce you to materials that have been reclaimed from existing buildings or have been recycled from pre and post consumer building and industrial waste, along with materials that can be used for retrofitting existing buildings to meet progressive building standards or in designing for deconstruction.

Curated by:

Megan Rider & Jen Wong

With support from:

Brandon Raettig & Kevin Rivera Samuel
Reclaimed Materials

AGED EUROPEAN LIMESTONE FLOORING
by Chateau Domingue
Limestone
Chateau Domingue is a Houston-based purveyor of reclaimed building materials and architectural elements sourced from Europe, including doors, fixtures, arches, and complete structures. One example is reclaimed limestone flooring. One characteristic of this material is its low porosity. This provides durability over time, protecting the flooring from water absorption and making it resistant to frost.

Stone flooring has a long lifespan, as it can be removed and reused indefinitely.
http://www.chateaudomingue.com/

Reclaimed Materials

ANTIQUE WHITE OAK FLOORING
by Elmwood Reclaimed Timber
White Oak
Antique White Oak flooring has been salvaged from its original use (typically in a barn or other structure in the Midwest or Eastern portion of the United States) and reclaimed for use as flooring. The salvaged wood is sanding smooth, burnished with patina and character, and develops rich, golden-hued color tones. The light tan to golden-brown sapwood of Antique White Oak flooring is lighter than its heartwood. White Oak is a hard and heavy wood, with a medium-bending and crushing strength. It is low in stiffness, but performs very well in steam-bending and has great wear-resistance. While the main characteristic of White Oak is its straight grain, it can also have an irregular or cross grain.

Wood, which can be removed, reclaimed and reused, is ultimately biodegradable.
https://www.elmwoodreclaimedtimber.com/

Reclaimed Materials

MISSION WHITE OAK RECLAIMED WOOD TABLETOP
by Terramai
White Oak
Post-Consumer wood salvaged from old buildings, bridges, wine and olive tanks, fencing, shipping dunnage, bleacher seating and other structures can be reclaimed and used in the manufacture of handcrafted tabletops and countertops. Once collected and processed, the reclaimed wood receives a second life. The reclaimed wood used in the production of this countertop is White Oak originating from industrial shipping in the eastern portion of the United States. The countertop was produced from precisely cut 1-½ inch thick planks, ranging in widths from 3 to 6 inches. The various planks were joined together using the biscuit joinery method and reinforced with recessed square steel tubing for added stability. The resulting countertop was then sanded, sealed, and finished with a clear oil or polyurethane.

Wood, which can be removed, reclaimed and reused, is ultimately biodegradable.
https://www.terramai.com/

Reclaimed Materials

RECLAIMED CORRUGATED METAL
by Austin Architectural Salvage
Metal, Steel
Combining visual appeal with performance, corrugated metal panels provide an economical means for creating unique architectural components. The ability to form multiple-radius curves eliminates seam lines and provides a smooth line for the eye to follow. Bold design statements and practical durability can be achieved through the use of anodized or boldly painted finishes in an almost unlimited color palette.

Corrugated metal can be removed, reclaimed and reinstalled elsewhere, or recycled and made into new metal products.
http://www.corrugated-metals.com/

Reclaimed Materials

RECLAIMED CONCRETE ROAD BASE
by 973 Materials
Demolition Concrete
Roadbase is the most common recycled product of concrete construction waste, which has been crushed and sized for uniformity. When roadbase is applied to driveways and parking areas to a depth of 2 - 3 inches, it will last from 4 - 6 years and often longer.

Roadbase is the last widespread application of construction waste before landfill.
http://www.973materials.com/

Reclaimed Materials

SALVAGED STRUCTURAL BRICK
by Gavin Historical Bricks
Fired Clay
Salvaged bricks are frequently used in historic preservation projects, selected for dimensional and period appropriateness. Gavin Historical Bricks, the largest supplier of antique bricks in the US, reclaims structural bricks from demolished factories and warehouses across the Midwest, in historically industrial sites such as Chicago and St. Louis. These oversized bricks, which typically range in color from dark red/purple shades to orange, can make a bold design statement when reused in new projects. For those building with deconstruction in mind, coupling new brick construction with lime mortar can make reuse simpler and more cost-effective down the road.

Bricks installed with lime mortar can be salvaged and reclaimed for reuse.
https://www.historicalbricks.com/

Reclaimed Materials

WAVES OLIVE WOOD TILES
by Wonderwall Studios
Olive wood
Waves is a modular, wood tile product made from the creamy-colored core of the trunk and branches of the olive tree. The tile’s modular assembly, varied natural patterns and geometric design enhance the product with a playful tone. Olive wood can be figured with patterns of curly, wavy, burl, or wild grain and has a sophisticated color palette of pink hues. Olive wood’s irregular knots and fascinating marbling ensure no two pieces are exactly the same. Further, the trunks of olive trees are dense and durable, which carries over to the performance of the finished product.

Wood tiles can be removed, reclaimed and reinstalled elsewhere, or recycled into wood pulp and reused in a new capacity.
http://www.wonderwallstudios.com/mission/
Reclaimed Materials
WEATHERED WOOD PANELING
by Centennial Woods
Wood
This post-consumer wood product is reclaimed from Wyoming highway and byway snow fence. Possible uses for the reclaimed wood include walls, ceilings, floors, beam wraps, fireplace surrounds and exterior siding on commercial and residential projects.

Wood, which can be removed, reclaimed and reused, is ultimately biodegradable.
https://centenialwoods.com/

Recycled Materials
EARTHENGGLASS TILE
by Interstyle Glass
100% Recycled Glass blended with Clay & Porcelain
Earthenglass is made with 100% recycled glass, blended with a mix of natural, regionally sourced, clay and porcelain for added durability. Earthenglass tiles have some natural color and texture variation, due to their handcrafted nature. The product excels in high traffic flooring applications, both interior and exterior.

Earthenglass can be recycled into new ceramic/glass products.
https://interstyleglass.com/

Recycled Materials
ECO-CEM® CEMENT TILE & SLAB
by Coverings Etc.
80% Recycled Portland Cement / 20% Recycled Wood Pulp
Eco-Cem® tiles and slabs are engineered from 80% recycled Portland cement and fly ash mix and 20% recycled wood pulp. They are double-pressed, autoclaved and manufactured with no resins, epoxies or VOCs, resulting in a breathable material that improves indoor air quality. Designed for application in exterior façades, flooring, counters, walls and industrial design, Eco-Cem® is available in 12 colors and has a water-repellent acrylic finish. Tone differences are possible between batches.

Eco-Cem® tiles and slabs have a long life-span and can be reused after the original installation.
https://www.coveringsetc.com/

Recycled Materials
ECO-TERR® TERRAZZO TILE & SLAB
by Coverings Etc.
Recycled Portland Cement Fly Ash & Aggregate
Eco-Terr® is a Future-Friendly™ natural terrazzo-type product engineered from pre-consumer, recycled Portland cement, fly ash (thereby prevented from contaminating waterways) and rare recycled marble and granite chips from quarries long since closed. The product is made without the use of resins or epoxies with zero VOCs, and is material health grade certified. It is also resistant to stains, chemicals, and fire. Tiles and slabs come in an array of colors, with aggregates ranging from micro to ever-increasing large format. Eco-Terr® Terrazzo is a versatile surface that can be used as indoor flooring, outdoor pavers, countertops, wall cladding, or even in furniture and other products.

Terrazzo has a long life-span and can be restored, reused or recycled into new terrazzo products after its original installation.
https://www.coveringsetc.com/

Recycled Materials
FLEK SURFACES & SHEET GOODS
by 3-Form
100% Varia Resin / 75% Recycled Content
3Form’s Flek sheet goods and panels are designed from a closed loop manufacturing process and composed of 75% recycled content. They are created from the trimmed edges of 3-Form’s Varia panels, which are ground down and encapsulated into new closed-loop panels, making each one universally unique. Flek panels are available in 1/4”, 3/8” and 1/2” thicknesses.

3Form recycles its products through a manufacturer takeback program called Reclaim.
https://www.3-form.com/

Recycled Materials
FLEXISURF VINYL FLOORING
by Yemm & Hart
100% Recycled Vinyl Auto Upholstery Scrap
A vinyl flooring material made from recycled auto upholstery scrap. When installed, it creates a surface that is harder than rubber but softer than wood, concrete or ceramic tile. One benefit of using auto upholstery scrap is its composition of polyester fibers, which provide reinforcing for added durability. The product is available in eight colors and four sizes, and can be used in a wide variety of commercial and residential applications, both indoors and outdoors.

Vinyl can be recycled and made into new vinyl products.
http://yemmhart.com/wordpress/

Recycled Materials
FLY ASH
by Boral America
100 % Fly Ash
Fly ash is a fine powder that is a byproduct of burning pulverized coal in electric generation power plants. It is excavated, screened, dried, and processed into a quality pozzolan (a substance containing alumino-silicate material that forms cement in the presence of water) for commercial use in producing concrete.

Pulverized coal burned in electric generation power plants can be recycled for use in the production of concrete.
https://boralamerica.com/

Recycled Materials
FORESSO TILE & SHEET GOODS
by Foresso
85% Recycled Material (Timber, Wood Dust, Plaster Waste and 0 VOC Resin)
Foresso is composed of timber, wood dust, plaster waste, and zero-VOC resin cast onto an 18mm birch plywood substrate. The product is made of 85% recycled material. 95% of Foresso’s own production waste is used for energy reclamation, with the remaining 5% sent to landfill. Foresso is suitable for interior surfaces in both commercial and residential environments, from flooring to table tops and wall coverings. The product is sealed with hardwax oils to provide a durable, long-lasting surface.

Although not yet widely recyclable, Foresso can be returned to the manufacturer for re-use and recycling.
https://foresso.co.uk/
Recycled Materials
LIME WHITE WATERSHED MASONRY BLOCK
by Watershed Materials
Recycled Post-Industrial Quarry Byproduct & Unwashed Aggregate
A masonry block made without the addition of cement. Rather, it is manufactured through the high compression lithification of lime, recycled ground granulated blast furnace slag and natural clays. The bright glacier white appearance of this product emerges from the unique lime, slag and clay alumino-silicate binder.

When installed with a lime-based mortar, masonry units can be cleaned and reused for future installations. https://watershedmaterials.com/

Recycled Materials
LISBOA CORK WALL SYSTEM
by Spinneybeck
93% Recycled Cork Product / 7% Resin
Lisboa is an acoustically absorptive composite cork wall system composed of 16 inch square tiles produced with waste material from wine stopper production. The resulting product is 93% recycled cork produced in a waste-free molding process. For installation, the tiles secure to the unique pressure fit rail system with a gentle push. The design of Lisboa tiles takes inspiration from the street grids of its namesake city (Lisbon, Portugal).

Cork can be recycled into new cork products, and is biodegradable at the end of its life cycle. https://www.spinneybeck.com/

Recycled Materials
PAPERSTONE SLAB & SHEET GOODS
by Panel Tech
50-100% Recycled Post-Consumer Paper & Phenolic Resin
Paperstone is a solid surface building material for homes, restaurants, office buildings and other spaces. It is created from 50 - 100% recycled paper, bound with a non-petroleum resin. Most Paperstone products are certified as recycled by the Rainforest Alliance to the Forest Stewardship Council® (FSC®) standards and are certified food safe by NSF International. In instances where recycled paper is not used, FSC-certified virgin fibers are used. The product is available in a variety of colors and sizes.

Paperstone is recyclable through manufacturer takeback. http://paneltechintl.com/

Recycled Materials
RECYCLED CLAY BODY TILE
by Fireclay Tile
70% Recycled Content (50% Post Consumer and Post Industrial Waste Recycled Clay)
Fireclay Tile’s recycled clay body tile is made from a mixture of clay, post-consumer glass and porcelain, and granite dust. The inclusion of post-consumer recycled porcelain, that was fired in its initial production, results in less shrinkage of the new product, as shrinkage occurred during the material’s initial firing. Fireclay’s recycled clay body tile features over 70% recycled materials with the addition of landfill-bound recycled porcelain, including over 50% post-consumer recycled materials from San Francisco and San Jose city recyclers; thereby preventing over 150 tons of porcelain waste from entering landfills.

Ceramic tiles are difficult to remove for reuse without damage, but occasionally can be recycled at ceramic recycling facilities, such as Fireclay Tile. https://www.fireclaytile.com/

Recycled Materials
REVIVE 1 UPHOLSTERY
by Kvadrat
100% Recycled Polyester
Revive is an upholstery textile made from post-consumer recycled polyester (PET) and was created with a focus on reducing the impact of production on the environment and natural resources. Revive’s design is inspired by the textures, colors and materials of harbours and fishing boats and is made from two unique colors, alternating in the warp and weft.

Post-consumer polyester can be re-recycled through the appropriate channels. https://kvadrat.dk/

Recycled Materials
REALLY SOLID TEXTILE BOARD
by Really.
70% Recycled Textile / 30% Bicomponent Binder
Really is a high-density textile board made from end-of-life textiles and cut-offs from other Kvadrat products. It is composed of 70% recycled textiles, and 30% bicomponent binder. The composite board is composed of cotton and wool, and its rigidity make it a compelling alternative to other board materials.

Really may be recycled into new Really products at its end of life. https://reallycph.dk/

Recycled Materials
TECHNO GLASS SURFACES
by Architectural Systems, Inc.
99% Pre- and Post-Consumer Recycled Glass
Made almost entirely from pre- and post-consumer recycled material, this glass surface is a sustainable option for both interior and exterior applications. Its translucent surface is decorative and functional, as it repels water and is stain-resistant. This glass is Class-A fire rated and available in a standard nominal size of 55” x 118” with a thickness of 20mm.

Glass can be recycled again and again. http://paneltechintl.com/

Adaptive Reuse Materials
BARKCLAD NATURAL BARK SIDING
by BarkClad
Natural Bark
BarkClad is an exterior siding product that utilizes tree bark otherwise destined for downcycling. The natural bark comes from poplar trees and is hand-peeled, dried in a certified kiln, hand-cut on-site, stacked, loaded and shipped for delivery within a one-week period, in order to maintain the natural integrity of the bark. By repurposing bark from trees that are harvested for use in the furniture and plywood industries, BarkClad natural bark siding diverts a by-product from downcycling towards a higher function.

BarkClad is biodegradable at the end of its life cycle. https://www.barkclad.com/
Adaptive Reuse Materials

**BAUX WOODWOOL TILES & PANELS**
*by Baux*
Sustainably harvested Swedish Fir & Pine / Non-GMO Wheat Bran / Potato Starch / Plat-derived Wax / Citrus Fruit Peels

Baux Wood Wool Tiles and Panels are rigid panels made from wood wool, cement, and water. Due to their open structure, the products are sound-absorbent. They are also moisture-regulating and fire-resistant. Baux Wood Wool products are available in a variety of shapes, including hexagon and circle tiles and quilted and striped panels.

Baux Woodwool Tiles & Panels are reusable when carefully deconstructed, and recyclable by manufacturer takeback. https://www.baux.se/

Adaptive Reuse Materials

**COMFORT BOARD WALL INSULATION 110**
*by Rockwool*
Basalt Rock & 16-40% Recycled Steel Slag

Comfortboard is a rigid mineral wool insulation sheathing board that is non-combustible, water-repellent, fire-resistant and sound absorbent. Comfortboard is an exterior non-structural insulation sheathing that provides a continuous layer of insulation around the commercial or residential building envelope.

Comfortboard Wall Insulation can be recycled by manufacturer takeback when feasible. https://www.rockwool.com/

Adaptive Reuse Materials

**ECOS AIR PURIFYING PAINT**
*by ECOS*
Water & All Natural Binders, Minerals and Pigments

ECOS Air Purifying Paint provides protective finish that dries to a hard, durable film. Not only is the product VOC-free; once applied, it acts as a surface purifier, improving indoor air quality. Its key absorbing ingredient is the mineral zeolite, which acts as a “molecular sieve” to trap large free-floating molecules from organic compounds such as formaldehyde and benzene. Other ingredients include water, natural and manufactured binders such as oleic acid and potassium salt, zero-VOC pigments such as titanium dioxide, mineral fillers such as limestone, and thickeners and builders from wood cellulose and resin.

ECOS Paints are not considered hazardous waste; excess paint can be disposed of in a traditional manner or upcycled for other projects. https://www.ecospaints.net/

Adaptive Reuse Materials

**EVERBOARD ROOF COVER BOARD**
*by Everboard*
100% Recycled Post-Industrial / Post-Consumer Plastics & Paper

Composite panel made from hard-to-recycle beverage cartons of plastic, aluminum, and paper, produced through compression and heat. The rigid panel is resistant to moisture and mold, and can be used as roof sheathing and wall board.

100% recyclable by the manufacturer. https://www.continuusmaterials.com/

Adaptive Reuse Materials

**FLEXIBLE PV SOLAR SHINGLE**
*by Uni Solar*
Silicon

Photovoltaic laminate panels are a flexible, light-weight, roof-top solar solution that require no penetrations or modifications to an existing roof structure. Because of their flexible design, these PV panels can adapt to nearly any application. Uni-solar has a higher average output when compared to traditional crystalline PVs and even performs well in partial shade.

Photovoltaic solar panels (PV panels) have an average lifecycle of 25 - 30 years, and the silica and metal components can be recycled, separately, and re-made into new panels. http://www.uni-solar.com/

Adaptive Reuse Materials

**GREENSCREEN RAINSCREEN**
*by Greenscreen*
Post Industrial Recycled Steel

A modular, welded wire panel system used for trellises, fencing, architectural screening and vertical plant support applications. Greenscreen can accommodate a wide variety of assemblies, and comes in many different shapes, sizes and colors, including custom options. The product makes room for green infrastructure, countering the urban heat island effect at the urban scale and providing shading and light control at the building scale.

With proper maintenance and care, Greenscreen is reusable in other projects, due to its simple assembly and disassembly process. http://www.greenscreen.com

Adaptive Reuse Materials

**PINESKINS SURFACES**
*by Studio Sarmite*
Pine Bark

PineSkins is a leather-like material made from the freshly harvested bark of pine trees. Usually discarded as pine tree residue, the bark is manually harvested, then treated naturally to soften the bark. Color pigments and wax are applied for durability and aesthetic enhancement, resulting in a unique piece with a pine aroma due to its origins.

Pineskins is biodegradable at the end of its life cycle. https://studiosarmite.com/

Adaptive Reuse Materials

**SUNTUITIVE INSULATED GLAZING UNIT**
*by Pleotint LLC*
Glass

Self-tinting thermochromic technology passively allows in optimal daylight, even when fully tinted. IGUs install as easily as any other glazing unit.

While laminated glass is difficult to recycle, Insulating Glass Units (IGUs) have a long lifespan and can be reused in future applications upon removal. https://suntuitiveglass.com/
Adaptive Reuse Materials

ULTRATOUCH™ DENIM BATT INSULATION by Bonded Logic Inc.
80% Recycled Cotton Fibers from Denim
UltraTouch™ Denim Insulation contains 80% post-consumer recycled natural fibers. The product contains no chemical irritants. It provides effective sound absorption and thermal performance, and can be installed in interior and exterior walls, as well as most ceiling applications with wood or metal framing cavities. The product is safe to handle and install, without the need for protective clothing or respiratory equipment.

Ultra Touch Denim Insulation is 100% recyclable and can be recycled by manufacturer takeback when feasible. https://www.bondedlogic.com/

Designing for Deconstruction

BAMDECK 3G DECKING by Cali Bamboo
60% Reclaimed Bamboo Fiber and 40% Recycled HDPE Plastic
BamDeck 3G is a waterproof decking product composed of 100% renewable or recycled materials, comprising 60% bamboo fibers and 40% high-density plastics. The decking planks are sealed on all sides, providing protection from moisture, staining, termites, fading and scratches.

Snap-together construction of BamDeck 3G eliminates the need for non-removable fasteners or glues, simplifying the deconstruction process. https://www.calibamboo.com/

Designing for Deconstruction

FACE MOUNT FLANGE JOIST HANGER by Strong-tie
Steel
The HUCQ is a flexible solid sawn lumber connector designed for structures requiring additional strength and safety factors. Its face-mount joist hangers have concealed header flanges and can be installed close to the end of the supporting beam. Also, its heavy-duty hangers install with Simpson Strong-Tie® Strong-Drive® SDS Heavy-Duty Connector screws for high capacity with no pre drilling for ease of installation.

Steel ties are recyclable or can continuously be recycled after deconstruction. https://www.strongtie.com/

Designing for Deconstruction

FLATCOR COMPOSITE PANELS by Ecor Global
100% recycled office paper
ECOR FlatCor is a composite panel made from fiber alloys of 100% recycled fiber from urban, farm, and forest materials. Produced using water, heat, and pressure, with no additives, the panels are extremely rigid and fully recyclable. Available in thicknesses from 1.6 mm to 7 mm in panels of 4-foot x 8-foot, its applications include signage, displays, and interior graphics.

ECOR’s FlatCor is 100% recyclable and compostable. https://ecorglobal.com/

Designing for Deconstruction

GLUELAM PLUS CROSS LAMINATED TIMBER by Structurelam
Pine Wood
Glulam PLUS and Cross Laminated Timber (CLT) are engineered wood products consisting of layered wood laminations bonded with a waterproof and strong adhesive. Made from Douglas-fir, SPF, and Yellow Cedar fibre, these products are widely used in large spans and vaulted ceilings. These products can be produced in a wide range of shapes, sizes, and configurations. A variety of finishes is available for aesthetics and durability. Like heavy timber, engineered wood is a high value and durable material that can be reclaimed and reused.

Engineered wood components can be disassembled with the proper detailing, or reclaimed for reuse. http://www.structurallam.com/home/

Designing for Deconstruction

THE GROUNDSCREW FOUNDATION SYSTEM by EcoFoundation Systems
Steel
Metal groundscrews reduce the demand for concrete by providing an alternative to concrete and driven pile footings. They are installed quickly thanks to their threaded design, and can be installed in challenging soil conditions without the need for digging. Once installed, infrastructure can be immediately installed—an advantage over concrete, which requires time to cure. Through used most often in solar installations, this technology is increasingly being used in large-scale construction projects. Another major advantage of this product is its reversibility, reusability, and recyclability.

The metal composition of threaded ground screw allows for reuse or recycling after the life cycle of the construction. https://ecofoundationsystems.com/index.html

Designing for Deconstruction

LIGHT GAUGE STEEL DRYWALL STUD by Clark Dietrich
48% Recycled Content Steel
Light-weight steel framing is an alternative to conventional light wood-framing for structural and non-structural assemblies. In comparison, it is lighter, stronger, and more resistant to moisture and insects. If screwed together, steel members can be disconnected more readily during deconstruction. Additionally, the material is infinitely recyclable.

Light-weight steel framing can be recycled or reused depending on assembly. https://www.clarkdietrich.com/
**OPTIMA ACOUSTIC CEILING TILES**
*by Armstrong*

**Fiberglass with DuraBrite® Acoustically Transparent Membrane of 71% Recycled Content**

Optima Acoustic Ceiling Tiles are a fiberglass product made of up to 71% recycled content, intended for suspended ceiling systems. The surface finish is an acoustically-transparent membrane that is resistant to impact, scratching, fire and soil. This factory-applied latex layer also increases the product's light reflectance. Product applications include both open and closed spaces.

Optima Acoustic Ceiling Tiles are recycled through the manufacturer’s recycling program, and upcycled into new products at the nearest plant.

https://www.armstrongceilings.com/commercial/en-us/

Designing for Deconstruction

**PREST PAVERS**
*by Hanover Architectural Products*

**Stone & Concrete**

High compressive strength and density, coupled with low water absorption, make Prest pavers a great alternative to stone pavers for pedestrian use. Made with 33 - 65% recycled concrete content, Prest pavers are available in a wide range of sizes and colors. The product is available in sizes of 12” x 12” to 24” x 48”, and has a compressive strength of 8500 psi.

Prest pavers can be removed and reused for new projects.

https://www.hanoverpavers.com/

Designing for Deconstruction

**PRIVACY WALL PARTITIONS**
*by Steelcase*

**Steel & Glass**

Unitized privacy wall panels are easy to install, disassemble and relocate, allowing for flexibility in a variety of spaces. When compared to traditional, non-modular construction, Privacy Wall can reduce costs by up to half and installation time by 30%. Made with nearly half recycled content, Privacy Wall is reusable, with over 60% recyclable components.

Privacy walls can be disassembled and reused in other applications.

https://www.steelcase.com/

Designing for Deconstruction

**STANDING SEAM METAL SHINGLE**
*by ATAS International*

**Steel**

Standing Seam Shingles are designed with a four-way interlock detail for weather tightness. The panels are installed over a solid substrate, with concealed fasteners. Transverse seams are staggered to provide a hybrid shingle and standing seam appearance. This product is available in aluminum or copper, in widths of 16” and either 36” or 60” in length, with a selection of over 35 stock colors or custom finishes.

Specialized finishes and coatings allow metal roofing to last 2 - 3 times longer than a traditional asphalt roof. Metal roofing often contains a high percentage of recycled content, and can be fully recycled at the end of its life.

https://www.atas.com/

Designing for Deconstruction

**THREADED METAL FASTENERS**
*by Acument*

**Assorted Metals**

Externally threaded fasteners by Acument are designed for the capability of removal on-site and include products such as critical fasteners, machine screws, screw and washer assemblies, and thread formed/rolled hardware. This conscious advancement in screw and fastener technologies allow for lower scrap rates, minimal debris generation, and easy removal and reuse in the field. This preserves the life-cycle of both the screws and fasteners, as well as the materials in which they are embedded, allowing for potential reuse in both cases.

Acumen's fasteners are more easily removed than nails and glues during deconstruction, which increases the reuse of other materials as well. Threaded metal fasteners also be reused, or are recyclable.

http://www.acument.com/

Designing for Deconstruction

**TIMBER PANEL CONSTRUCTION SYSTEM**
*by Systimber*

**Pine Wood**

Systimber is a solid wood construction system that is designed to be deconstructed and rebuilt whenever needed. The system is made from non-warping, kiln-dried pinewood components that are pre-finished and equipped with double EPDM seals that are hidden after installation. Components are attached and secured through the use of Systimber anchors, bolts, and brackets, as well as tongue and groove joints, in a system of “self-supporting construction.

Solid wood prefab construction systems can be disassembled and rebuilt.

https://www.systimber.com/en/

Designing for Deconstruction

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