

CREATING A LASTING IMPACT: Accoya® Wood Contributes to a Dallas Neighborhood's Revitalization



The scenario:

As part of a large community renewal effort in South Dallas, the Jubilee Park Resource and Community Centers were envisioned as the new communal hub for a historically underprivileged neighborhood.

Both centers needed to accommodate a host of different needs—from housing a police department substation to providing space for senior citizen programs and after school care for children—while also bridging the stark gap between old and new. While turn-of-the-century homes in the area were largely wood in nature, newer constructions built by local and national non-profit organisations relied heavily on brick and other materials, causing an imbalance.

The Resource and Community Centers needed to establish a unifying presence while maintaining cost-effectiveness and creating usable, lasting resources for the community. Sustainability was also a priority for Brent A. Brown Architects, the designers of the centers.

The solution:

Opting to create a wood siding on both the buildings, Brent A. Brown Architects selected Accoya wood for its strength, durability, aesthetic impact and sustainable sourcing. The wood was milled for a custom joint application. Rather than creating a typical tongue and groove, a 45 degree miter joint without any corner trim was made to hide the seam. Unlike other woods which move and separate, Accoya wood remained tight at the joint for a flawless finish.

“The Accoya wood held its dimensional characteristics incredibly well,” says Dan Finnell, Partner with brownarchitects and project manager of the Jubilee Resource Center and Community Center construction projects. He adds, “It was exposed to the hot Texas sun for months, prior to additional owner-request stain, and we never had any issues with cupping or splitting.”

“” “The mission of Jubilee Park and Community Center Corporation is to be a catalyst for community renewal and enrichment to the Dallas/Fair Park neighborhood, with special emphasis on comprehensive, community revitalization and the education of children and adults.”

From the dedication of the new Resource and Community Center



The result:

With similar durability characteristics of tropical hardwoods like ipe and massaranduba, Accoya wood offered a robust alternative to standard woods that will serve the community for decades to come. Given Accoya's LEED credentials, it also aligned with the project's sustainability goals.

In addition to its reliable strength, the Accoya siding conveys the welcoming, inclusive spirit of Jubilee Park. "It has a very warm feeling to it ... It draws you in to the building," Dan comments. While the owner opted to stain the wood for its use in Jubilee Park, Accoya wood can also be used without any additional finishing.

The new centers were successfully constructed to provide an enduring, adaptable space that brings people in the community together. All in all, the Resource and Community Centers both contribute to Jubilee Park's mission "to be a catalyst for community renewal and enrichment."

“ ” “Accoya is a quality dimensional product. It has a very warm feeling and draws you into the building”

Dan Finnell, Partner brownarchitects



To learn more about Accoya® wood, visit
www.accoya.com

Architect
 Brent A. Brown Architects
www.brentabrown.com

Distributor
 Universal Forest Products

Project Location
 Dallas, Texas USA
Date
 September 2010

STRENGTH MEETS SUSTAINABILITY:
University of Florida Solar Decathlon Team Uses Accoya® Wood



The scenario:

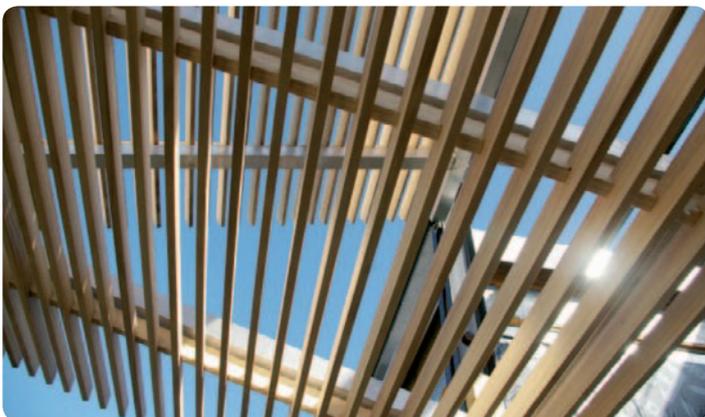
Competing in the Solar Decathlon, an international competition that challenges universities to design and build a self-sustaining, energy-efficient solar house, the University of Florida's team, Project RE:FOCUS, sought sustainable, high-performing materials for its innovative design.

The solution:

The team merged elements of traditional Florida "Cracker Houses" with newer design strategies to design and build a dwelling that could withstand a range of climatic conditions while lowering energy consumption and providing optimal livability.

Accoya® wood was chosen for the five adjustable exterior shading devices that surround the home, creating a highly adaptable facade. These screens can be fully opened to flood the house with sunlight or closed to control sunlight and reduce solar gain during the summer months. They also act as a rain screen, a wind blocker and provide privacy control. The use of Accoya wood contributes to the house's ability to withstand a variety of weather conditions; with resistance to UV degradation, outstanding dimensional stability and superior thermal properties, the Accoya wood screens can endure extreme conditions without compromising on strength or durability.

Dereck Winning, project lead for the University of Florida's house, says, "We chose Accoya wood due to its environmentally friendly process and because it performs similar to hardwood."





“ ” “Accoya wood really fell in line with our sustainable goals for the house.”

Paige Mainor, Project RE:FOCUS design contributor

The result:

The Project RE:FOCUS team created a house that upholds strict energy conservation standards without cutting corners when it comes to aesthetic impact or longevity. Accoya wood aligned with the team’s goals for sustainable sourcing and the product offered a durable, cost-efficient solution with minimal need for maintenance. The wood’s natural appearance is retained longer than standard woods, plus it’s weatherproof and durable against rot and decay.

With their award-winning effort, the University of Florida team designed not only a home using Accoya wood but also a model for the future.



To learn more about Accoya® wood, visit www.accoya.com

Architect
University of Florida
www.solardecathlon.ufl.edu
Principal
University of Florida

Distributor
Universal Forest Products
Project Location
Madrid, Spain / Gainesville, Florida
Date
June 2010

URBAN RENEWAL:

Accoya® Wood Meets Multiple Needs in Mixed Reuse Project



The scenario:

With the urban renewal and development occurring in Fort Worth, Texas, both new construction and adaptive reuse are reshaping the community.

At 1000 Foch Street, near the large West 7th development project, sat a Quonset hut and, adjacent to it, an old, unused warehouse. When Cunningham Architects started to conceptualize a new look for 1000 Foch Street, they sought robust, sustainable, and low maintenance materials.

With the planned transformation of the Quonset hut and warehouse into an office complex, it was also important that Cunningham Architects created an attractive, welcoming façade that would serve the community and multiple users for years to come.



The solution:

In addition to the Quonset hut and neighboring warehouse, the property owners also purchased the land between the two buildings. Renovating the original buildings inside and out, Cunningham Architects also designed a new building to connect the two existing structures.

Due to its sustainability credentials, high performance and low maintenance, Accoya® wood was selected for several applications for 1000 Foch Street: lap siding on the existing buildings, rain screens on the new building and, finally, an additional profile was used on the top and backside of the old warehouse. All in all, 10,000 lineal feet of Accoya wood were used for the rain screen strips and an additional 5,000-plus lineal feet were employed for a hidden nail siding profile.

Given Accoya wood's durability, strength and aesthetics, it provided a universal solution for a multitude of different applications. Among these, Accoya's outstanding thermal insulation qualities made it an ideal fit for the rain screens, which were intended to limit heat absorption.

Steve Morrison of Universal Forest Products, the distributor of Accoya wood for the 1000 Foch Street project, says, "Accoya was a good fit for the project. It's a very stable substrate with little expansion/contraction or splitting and cracking."



“With Accoya wood, we continue to get repeat customers. We haven’t sold Accoya wood to anybody who hasn’t continued to use it in some fashion on their next projects.”

**Steve Morrison, Distributor
Universal Forest Products**

The result:

Because Accoya wood is a stable substrate, it was applied with confidence for different uses without risk of buckling, twisting or warping of the wood. To achieve the desired natural look, Accoya was left uncoated and unstained to allow it to weather and develop its own patina over time.

While Ipe and cement board were considered as alternatives, Cunningham Architects selected Accoya wood because of its natural beauty in addition to its performance record. The non-toxicity, renewable sourcing and low maintenance of Accoya wood also met the LEED standards the architects aimed for.

“To the client, the natural beauty of wood was a very important juxtaposition to the surrounding brick and steel,” said Lonnie Burns, project lead with Cunningham Architects. “Accoya wood’s impressive environmental credentials and stability allowed us to leave the wood natural, creating a stunning visual impact and a strong environmental statement.”

To learn more about Accoya® wood, visit
www.accoya.com

Architect
Cunningham Architects
www.cunninghamarchitects.com

Distributor
Universal Forest Products

Project Location
Fort Worth, Texas USA

Date
September 2010

CHALLENGING THE ELEMENTS: Exclusive Beach Bar & Restaurant Features Accoya® Wood Throughout



The scenario:

The Grand Hotel Huis ter Duin in Noorwijk originally opened in 1885. Once favoured by Dutch and Belgian royalty, this imposing hotel has stood the test of time and is one of the last privately owned 5 star hotels in the Netherlands.

The current owners consistently strive to offer a superior experience and their flair for innovation most recently led to the creation of 'Breakers Beach House', a bar and restaurant nestled amongst the dunes on the stunning stretch of beach overlooked by the hotel.

Open to hotel guests and the public, Breakers is designed to be sympathetic to the natural environment, through the use of natural, sustainable materials. Given its location facing the North Sea, the materials used needed to be dimensionally stable and durable and maintenance frequency was also a consideration.

The solution:

A number of species were considered but Accoya was chosen because it offered the best solution as a high performance environmentally compatible product that would answer the project's need for:

- Suitability for use across a number of applications, including:
 - windows - cladding - railings - planters
 - doors - mullions - trusses
- Sustainability
- Dimensional stability
- Durability
- Lower maintenance cycles than other less dimensionally stable species.

The wood was coated with Sikkens Rubbol WP 195 (one flowcoat primer) and Rubbol WF 375 (one spray topcoat).



“ ” “We considered Meranti but ultimately recommended Accoya wood for its outstanding durability and dimensional stability, attributes that really count in demanding coastal weather”

Eline van Leeuwen, Director, Van Leeuwen Kozijnen

The result:

An aesthetically pleasing beach bar and restaurant that stands out from the crowd, yet blends in to the environment, offering an informal but high quality dining experience.

“We considered Meranti and Accoya but ultimately recommended Accoya for its outstanding durability and dimensional stability, attributes that really count in the demanding coastal weather conditions that Breakers is exposed to. Dimensional stability is also very important when you have multiple adjacent doors in order to keep drafts at bay and prevent jamming. We are delighted with the end result which meets our expectations and those of our customer.” Eline van Leeuwen, Director, Van Leeuwen kozijnen



To learn more about Accoya® wood, visit www.accoya.com

Principal
Grand Hotel Huis ter Duin
www.huisterduin.com

Joinery Company
Van Leeuwen kozijnen

Project Location
Noordwijk, The Netherlands

Date
Opened Summer 2010

RESTORATION OF AN HISTORIC LANDMARK: Accoya® Wood for Replacement Windows in Iconic Lighthouse



The scenario:

The iconic 177 year old Belle Tout Lighthouse which sits high on the cliffs above the sea at Beachy Head, Eastbourne, Sussex (UK), was purchased by private owner, David Shaw in 2008. David immediately set about an extensive renovation programme to convert the historic building into an exclusive and unique guesthouse.

With the exception of the metal windows around the top of the tower where the lamp was once housed, the remaining existing windows were of timber construction in a mixture of styles and timber species and were generally in very poor condition, letting in both wind and rain; they were also inefficient in terms of energy conservation as they were mainly single glazed.

Following discussions with the Local Authority Planning & Conservation Department, Mr Shaw decided to replace all of the windows. Bearing in mind the age and location of the building, the local Conservation Officer expressed a preference for the replacement windows to be timber. Mr Shaw was keen to commission a UK based manufacturer, ideally local to Sussex.

The new windows should:

- be of proven design, air- and watertight
- be as energy efficient as possible
- require limited ongoing maintenance
- be cost effective both in terms of initial and whole life cost
- be manufactured from a timber species that is as durable as possible but also from certified sustainable sources
- be made with secure and reliable hinge and locking systems



“ ” “Accoya wood was the ideal choice for Belle Tout because of its excellent energy saving credentials”

David Pattenden, Managing Director, Westgate Joinery

The solution:

After discussing the project with a number of companies and carrying out extensive internet research, Mr Shaw settled on Westgate Joinery and the use of revolutionary high technology Accoya wood for his windows. The windows installed carry an ‘A’ Rating under the BFRC Energy Rating Scheme.

Westgate Joinery’s Managing Director, David Pattenden, commented, “Accoya wood was the ideal choice for Belle Tout. With high quality stainless steel or ‘tri-coated’ multipoint locking systems, ‘easy clean’ hinges and ‘A’ rating under British Fenestration Rating Council’s Energy Rating scheme, Accoya wood has excellent energy saving credentials.”

The result:

“The new windows have made a vast improvement to the property visually and in terms of energy and heat retention and have made a significant reduction in noise from the wind in such an exposed location. I was most impressed with the attention to detail and general management of the project by Westgate’s staff from concept to completion,” said Mr Shaw.

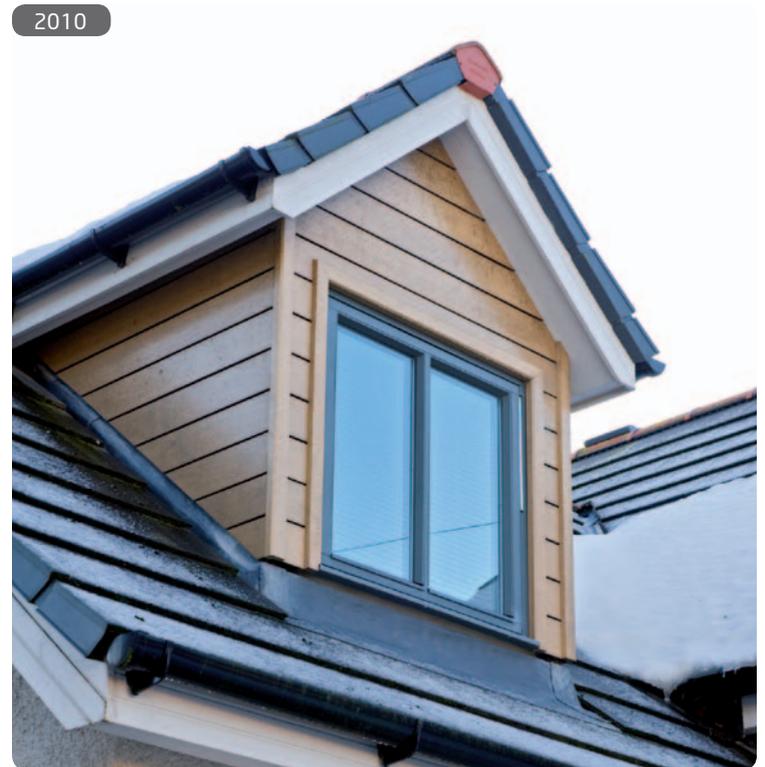
The Belle Tout Lighthouse was featured on Channel 5 television’s ‘Build a New Life in the Country’ programme in January 2010 and opened its doors to guests in March 2010.

To learn more about Accoya® wood, visit www.accoya.com

Joinery Company
Westgate Joinery
www.westgatejoinery.co.uk
Date
Restoration: 2009 to 2010

Project Location
Beachy Head, Eastbourne,
United Kingdom
Images
© Westgate Joinery & Rob Wassell

FIRST UK ACCOYA WOOD CLADDING PROJECT REVISITED:
Accoya® Wood Cladding for Private Residence: Installed 2006, Revisited 2010



The scenario:

Architect, Gordon Aitken, had thought of building his own home for some time and the perfect opportunity presented itself when a narrow strip of land, measuring 400 m² and with outline planning permission, became available in a residential street in Fife, Scotland.

Mr Aitken's mission was to build a house within a tight, controlled budget that would maximise the use of the space available. The project became something of a family affair, involving his father and brother as well as his own hard labour. His strong belief in quality rather than speed resulted in a twenty month project and the use of some innovative techniques and materials, including Accoya wood.

“From the outset I was impressed by the benefits of Accoya wood, including its outstanding 60 year life (BRE) and the significant reduction in timber shrinkage and expansion. Almost 5 years later, I continue to be impressed and am very happy with the performance of the wood and the coating.”

Gordon Aitken, Architect



The solution:

The external finish of the house included cladding, combined with wet dash render and concrete roof tiles. Accoya wood was selected after extensive evaluation of other cladding products.

“As an architect, I knew from the outset that I wanted a cladding material with minimal maintenance. However, the aesthetics were also paramount to a successful design,” said Mr Aitken.

“I considered many options including pre-painted / wood grain-effect Fibre-cement boards, heat treated wood, Siberian Larch and - the architect’s favourite - Western Red Cedar. However, I was impressed with the benefits of Accoya, including its outstanding 60 year life (BRE) and the significant reduction in timber shrinkage and expansion.”

The location of the house, approximately 10km from the sea and at 56° north - meaning that it is north of Moscow, Winnipeg and even Novosibirsk, the capital of Siberia - means that the cladding must be able to withstand harsh external conditions.

The result:

A 145 x 19mm thick “rainscreen” cladding board with tapered, horizontal, open joints was developed for the house, using approximately 30 m² of Accoya wood. The sandstone colour cladding was factory coated with a translucent Sikken's Natural Balance coating system applied by Environmental Coatings and backed by an industry-first 10 year guarantee for cladding with a contemporary smooth surface.

The project was completed in July 2006 and was revisited in December 2010, after 4.5 years’ exposure. There was found to be no sign of rot, decay or cracking and the coating performance is excellent with good UV resistance and no blisters. The slightly dirty appearance of the cladding is caused by sap from nearby trees which, it is reported by the owner, is on the surface only and is easily washed off.



Tree sap on the wood’s surface easily washes off

To learn more about Accoya® wood, visit
www.accoya.com

Principal
Private

Date
Completed July 2006.
Revisited December 2010

Architect
Gordon Aitken

Project Location
Near Glenrothes, Fife, Scotland

Cladding Supplier
Russwood
www.russwood.co.uk

DINING IN STYLE ON THE BANKS OF LOCH LOMOND: Accoya® Wood Cladding for Prestigious Scottish Restaurant



The scenario:

Situated on the southern shores of Loch Lomond, the prestigious De Vere Cameron House Hotel is one of Scotland's premier hotel destinations. The historic building sits within 100 acres of unspoilt parkland and is renowned for its fine dining.

In 2008, the hotel expanded its dining options with the launch of the Boathouse Restaurant beside the Loch. The Boathouse was to be a stylish, wood-clad, New England-style building that would appeal to discerning guests. It required a highly durable and stable cladding finish that sat comfortably within the natural environment and - importantly - would stand the test of time.

The solution:

Following the thorough evaluation of a range of timber species by cladding specialists, Vincent Timber, Accoya was specified for its superb aesthetics, sustainability, excellent dimensional stability and durability.

The external cladding was supplied fully factory coated and a total of 10,000 linear metres of Accoya wood was used, applied in horizontal and vertical profiles, along with trims, reveals and corners. Elsewhere, Accoya provided the finishing internal touches to the bar and restaurant areas.

The Accoya wood cladding was coated with a Cetol BL Sikens water based acrylic coating. Factory coating the cladding prior to delivery enabled rapid installation.

“” “We chose Accoya after evaluating it against other cladding products and our client is pleased with its performance in both its internal and external uses.”

Darren Powell, Vincent Timber



The result:

“We chose Accoya after evaluating it against other cladding products and our client is pleased with its performance in both its internal and external uses... Accoya offers superb stability and durability which guarantees an excellent performance. It is very easy to handle and the absence of cracks made it ideal for this project,” said Darren Powell of Vincent Timber.

After 2.5 years the appearance of the wood is excellent and there is no sign of rot, decay or coating degradation and the colour retention of the coating is exceptional.

To learn more about Accoya® wood, visit www.accoya.com

Date
July 2008
revisited December 2010

Architect
3DReid, Falkirk

Project Location
Loch Lomond, Scotland
Cladding Supplier
Vincent Timber
www.vincenttimber.co.uk

PARK & RIDE FOR A BETTER WORLD:
Accoya® Wood in Bus Shelter made Entirely from Sustainable Materials



The scenario:

Guildford Borough Council commissioned a team of designers, led by BBM Sustainable Design, to build a new park & ride shelter in the Merrow suburb of Guildford, Surrey, to be made entirely from sustainable materials.

Park and ride facilities allow commuters to avoid the stress of driving in to a congested town or city and facing scarce, expensive city centre parking, whilst at the same time taking traffic off the roads to lessen carbon emissions.

Duncan Baker-Brown of BBM says, "Merrow Park & Ride had to have a very small carbon footprint; that's not just a building that doesn't cost a lot to run and maybe creates some of its own electricity or heat but a building where you really have to consider all the materials you use carefully."

Whilst sustainability and energy efficiency were major considerations, the longevity and maintenance requirements of the materials used were also important.





The solution:

The design team chose a prefabricated construction system called MODCELL® which comprises highly engineered timber frames in-filled with locally sourced straw bales, creating a super insulated low energy building.

The system was complemented by five dimensionally stable and thermally efficient 'A' rated windows and one door made from Accoya Wood and the building was finished with sweet chestnut cladding from local coppices.

The door and windows were finished with three coats of factory applied Satin Jet Black and 1.25 m³ Accoya wood was used.

The Accoya wood was supplied by Westgate Joinery who, says Duncan Baker-Brown, are "very innovative in their use of materials ... they do use new, experimental materials and seem to understand the potential of them."

The result:

"We are really happy about the way Merrow Park & Ride has turned out. The windows look great ... it's one of those buildings that came together really easily," said Duncan Baker-Brown.

Combining sustainable, high performance and, where possible, locally sourced, materials has enabled BBM Sustainable Design to deliver what was required by Guildford Borough Council. Some of the electricity is generated by photovoltaic panels on the roof and the roof is finished with a growing mat of sedum flowers to create some much needed habitat for bees whilst keeping the building warm in winter and cool in summer.

A spokesman for Guildford Borough Council said: "The initiative is part of our commitment to improve residents' local surroundings, by focusing on issues that matter most to them, such as a cleaner, safer, greener environment."

“” We are really happy about the way Merrow Park & Ride has turned out. The windows look great.”

Duncan Baker-Brown about the use of Accoya at Westgate Joinery

To learn more about Accoya® wood, visit www.accoya.com

Joinery Company
Westgate Joinery
www.westgatejoinery.co.uk

Date
October 2008

Architect
BBM Sustainable Design
www.bbm-architects.co.uk

Project Location
Merrow, Surrey, United Kingdom

Images
© ModCell®
www.modcell.com

Contractor
Deeks & Steere PLC
www.deeksandsteere.co.uk