

# Use More Wood in the Public Realm

Breakfast discussion 1 March 2023  
Durable wood construction in the public realm

Fredrik Westin



**wei-ieo**

European Institute for Wood Preservation

[wei-ieo.org](http://wei-ieo.org)

# Who are Wei

- European industry trade association representing the treated wood industry
- Founded in 1951 and with registered office in Brussels
- 200 member companies across Europe:
  - wood processors,
  - preservative manufacturers,
  - related service organizations such as research and testing institutes and specialists

## Activities

- Member advice
- Monitor and advocacy
- Standardization
- R&D Projects
- Industry cooperation
- News and documents
- Meetings and congresses



*Some example of products developed and produced by WEI-IEO Members*

# Treated wood creates value

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- Members are SMEs with a few large groups. In all about 8 000 companies and 250 000 employees in wood treatment and related
- Production of treated wood is above 7 million m<sup>3</sup>
- Treatment adds up to 8% of cost to wood and extends functionality and service life with 3-5 times (15-50 year or more)
- No European wood species have a natural durability that is competitive with treated wood

# Examples of wood in the public realm

- Other areas of use, not included in today's topic is:
  - Infrastructure (Poles and Railway Sleepers)
  - Farming (Fencing, agriculture)
  - Housing frames
  - Private use (decking, wood in the garden)
- 9 slides, 8 seconds each
- (<https://www.pinterest.se/Traskyddsforeningen/>)
- *Imagine were and how in your realm!*





Concrete Products in Norwich  
From Attlebridge Concrete...



Concrete Block Fence - Types...

Kellie Rinker



Acoustic Fencing

Jacksons Fencing



Barriera antirumore con Pannelli  
in Acciaio Corten | CIR...



PPE Bolton Local Deliveries Click  
and Collect



Acoustifence-Noise Reducing  
Fences



BARRIERA ANTIRUMORE  
FERROVIARIA "CIR HS" | CIR  
Ambiente...



Timber Acoustic Fencing |  
Acoustic Barriers | Procter...



Acoustic - Davison Fencing



Commercial Fencing and Gates



What Kind of Fence Will Block  
Road Sounds Best?



Noise Barrier, Sound Absorptive  
Precast Concrete Noise...



Acoustic fencing and noise  
reducing fences made from  
timber...



Trä i anläggningar - Svenskt Trä



Wooden slatted fencing, to be  
attached on top of a garden...



Trä i anläggningar - Svenskt Trä



55 The Best Fence Wooden  
Design That You Can Try In Your...



ParisGainsbourg07 Landscape  
Architecture Works | Landezine...



Timber Acoustic Fencing |  
Acoustic Barriers | Procter...



Stunning Backyard Privacy...

FRUGAL LIVING



Acoustic Barriers and Acoustic  
Fencing



Horizontal Wooden Fence & Gate  
(Wall Extension) - Hollywood



BBC Studios Cardiff | Procter  
Contracts



Gabion Noise Barrier  
Sound Proof Fence

FRUGAL LIVING



Acoustic Highway Fencing Detail  
- Akustik ve Ses Yalıtımı



Vadeggio-Cassarate Gallery / Cino  
Zucchi Architetti



BBC Studios Cardiff | Procter  
Contracts



Noise barriers



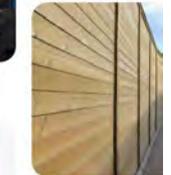
Acoustic Highway Fencing Detail  
- Akustik ve Ses Yalıtımı



Fencing NZ | Comr  
New Zealand



Gabion Noise Barrier  
Sound Proof Fence

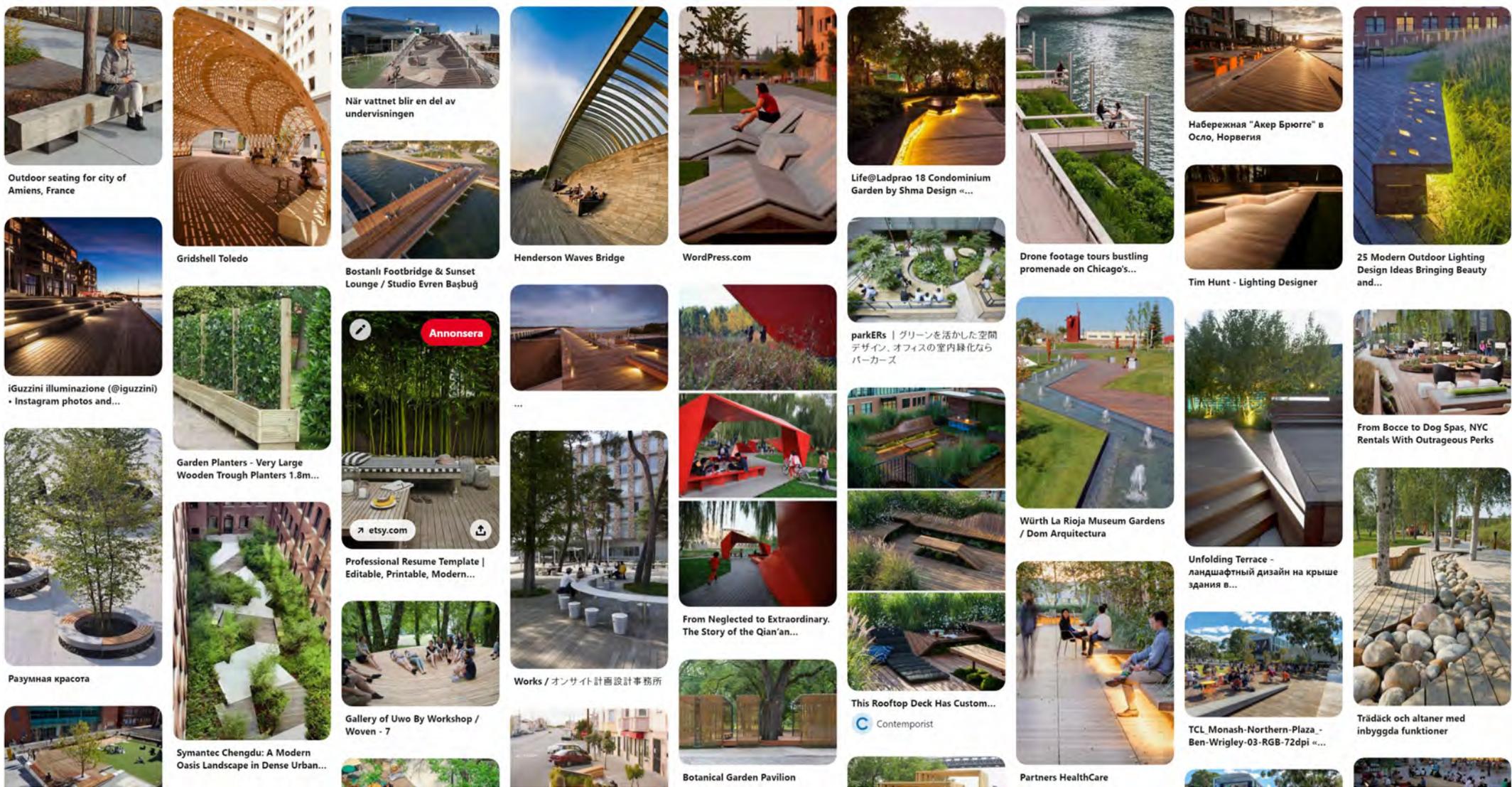


Jakoustic® Reflective  
Fencing | Acoustic I



Fencing NZ | Comr  
New Zealand





Outdoor seating for city of Amiens, France

Gridshell Toledo

När vattnet blir en del av undervisningen

Bostanlı Footbridge & Sunset Lounge / Studio Evren Başbuğ

Henderson Waves Bridge

WordPress.com

Life@Ladprao 18 Condominium Garden by Shma Design «...

Drone footage tours bustling promenade on Chicago's...

Набережная "Акер Брюгге" в Осло, Норвегия

Tim Hunt - Lighting Designer

25 Modern Outdoor Lighting Design Ideas Bringing Beauty and...

iGuzzini illuminazione (@iguzzini) • Instagram photos and...

Garden Planters - Very Large Wooden Trough Planters 1.8m...

Annonsera

etsy.com

Professional Resume Template | Editable, Printable, Modern...

Gallery of Uwo By Workshop / Woven - 7

...

Works / オンサイト計画設計事務所

From Neglected to Extraordinary. The Story of the Qian'an...

Botanical Garden Pavilion

parkERs | グリーンを活かした空間デザイン。オフィスの室内緑化ならパークース

This Rooftop Deck Has Custom...

Contemporist

Würth La Rioja Museum Gardens / Dom Arquitectura

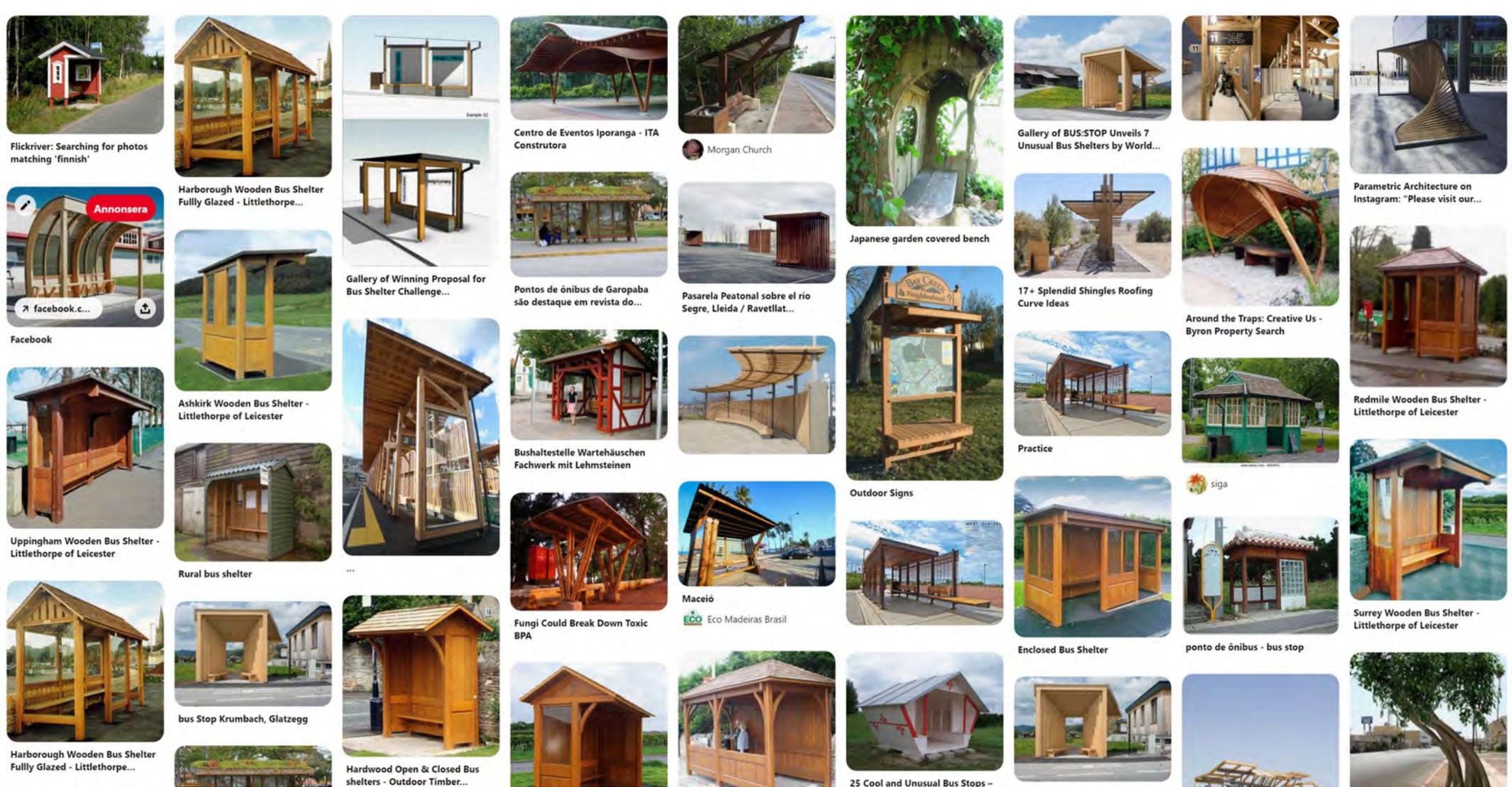
Partners HealthCare

From Bocce to Dog Spas, NYC Rentals With Outrageous Perks

Unfolding Terrace - ландшафтный дизайн на крыше здания в...

TCL Monash-Northern-Plaza - Ben-Wrigley-03-RGB-72dpi «...

Trädäck och altaner med inbyggda funktioner



Flickrriver: Searching for photos matching 'finnish'

Annosera  
facebook.c...

Facebook

Ashkirk Wooden Bus Shelter - Littlethorpe of Leicester

Uppingham Wooden Bus Shelter - Littlethorpe of Leicester

Rural bus shelter

Harborough Wooden Bus Shelter Fully Glazed - Littlethorpe...

Gallery of Winning Proposal for Bus Shelter Challenge...

Ashkirk Wooden Bus Shelter - Littlethorpe of Leicester

Rural bus shelter

bus Stop Krumbach, Glatzegg

Hardwood Open & Closed Bus shelters - Outdoor Timber...

Sample 02  
Gallery of Winning Proposal for Bus Shelter Challenge...

Gallery of Winning Proposal for Bus Shelter Challenge...

Bushaltestelle Warthhäuschen Fachwerk mit Lehmsteinen

...

Hardwood Open & Closed Bus shelters - Outdoor Timber...

Centro de Eventos Iporanga - ITA Construtora

Pontos de ônibus de Garopaba são destaque em revista do...

Bushaltestelle Warthhäuschen Fachwerk mit Lehmsteinen

Fungi Could Break Down Toxic BPA

25 Cool and Unusual Bus Stops -

Morgan Church

Pasarela Peatonal sobre el rio Segre, Lleida / Ravellat...

Outdoor Signs

Maceió Eco Madeiras Brasil

25 Cool and Unusual Bus Stops -

Japanese garden covered bench

17+ Splendid Shingles Roofing Curve Ideas

Outdoor Signs

25 Cool and Unusual Bus Stops -

Gallery of BUS-STOP Unveils 7 Unusual Bus Shelters by World...

17+ Splendid Shingles Roofing Curve Ideas

Practice

Enclosed Bus Shelter

Enclosed Bus Shelter

Gallery of BUS-STOP Unveils 7 Unusual Bus Shelters by World...

Around the Traps: Creative Us - Byron Property Search

sigla

ponto de ônibus - bus stop

25 Cool and Unusual Bus Stops -

Parametric Architecture on Instagram: "Please visit our..."

Redmile Wooden Bus Shelter - Littlethorpe of Leicester

Surrey Wooden Bus Shelter - Littlethorpe of Leicester

25 Cool and Unusual Bus Stops -



Forest crossroads



Gallery of House in The Patagonia Fjords / Armando Montero...



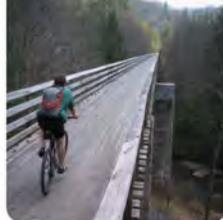
Zig Zag Bridge Over Irises Kanazawa, Japan



Roadtrippers Magazine | Roadtrippers



Bicycle tourism is on the rise



The Virginia Creeper Trail



Why Everyone In Virginia Should Visit This One Tiny Town



High Bridge Trail State Park



A Surprisingly Luxe Cycling Trip Through the Rust Belt



Bridal Veil installation by Louis Sicard is a water curtain...



Arninge-Ullna Riparian Forest Park | Stockholm, Sweden...



In Purisma Creek Redwoods, #45



Passadiços do Paiva.



Outdoor Rooms - Steps



14 Under-the-Radar Beaches You...

Condé Nast Traveler



Winding Woods Walkways



A beleza surpreendente dos Passadiços do Paiva



microcoasts.



A Trip to the Old Moss Woman's Secret Garden



Visitando as Cataratas - Blog do Rodrigo - 1000 dias



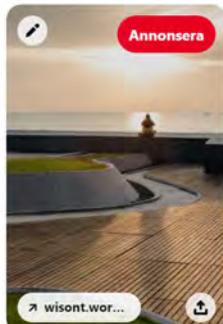
5 actividades turísticas fora do vulgar em Portugal



Lammasaari Boardwalk by Nomaji « Landscape Architecture...



Four Seasons Hotel in Koh Samui, Thailand



Baan San Ngam Condominium



Passadiços do Paiva: dicas para quem gosta de sossego...



A Peaceful Pathway



Os Passadiços do Paiva



Woodland Scenic Just Plug O Scale Wooden Pole Street...



18 0 0  
Belysningsstolpe i Tantolunden  
Svenska Träsnyddsföreningen



15 0 0  
Svenska Träsnyddsföreningen



Asuntomessualue, Mikkeli, Suomi, Katuvaalaistus, Puupylväät...



Utomhusbelysning i trä



Custom Furniture handmade...  
Speas Interior Design



Ny katalog på trästolpar



Home - TimberLab  
TimberLab



Super Landscaping Lighting...  
Landscaping



Candéliance : Éclairage et aménagement des espaces urbains...



23 0 0  
Belysningsstolpe i Skidbacke  
Svenska Träsnyddsföreningen



ANGELO - TimberLab



Lamps For Your Home - House And Home Review



Garden 'bollard' Driveway Light Made Out of Pallet Wood & a...



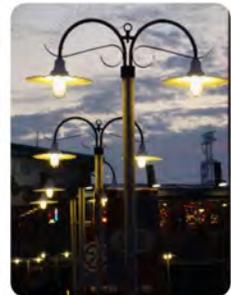
Lantaarnpaal  
TimberLab



Lantaarnpaal  
TimberLab



Stoere lantaarnpaal  
TimberLab



Sarah Retzloff



DuurzaamBuiten.nl



Lantaarnpaal  
TimberLab



rt



TimberLab



Home - TimberLab  
TimberLab



Custom design and manufacture wood light poles



Backyard Fence Design Ideas to Inspire You | Yard Surfer



41 Blooped Backyard Landscaping Railway Sleepers...



20 Inspiring Tips for Building a DIY Retaining Wall



Bygga stödmur



Simple Timber Sleeper Retaining Wall Design — Funmom Home...



DIY Garden Retaining Walls • The Garden Glove



20 Inspiring Tips for Building a DIY Retaining Wall



Specialty Gardening: I am so proud of my new pyramid!, 1 by...



Great fort, if your yard has little room and hang - Porch...



Parking Lot Repair Charlotte NC Asphalt Paving



Slänt - del av trädgården med möjligheter



It's ok. We've got the tools to fix this.



Retaining Wall Contractors in Auckland



How to Build an Interlocking Retaining Wall



Retaining wall photos



Landscape Design - Pro Earth Landscaping



36 Garden Ideas : Small Garden Design Ideas - Homiku.com



51 ideas garden path ideas...



Steps from the bottom up



AITIM



River mooring construction... Youn Fet



Outdoor Wooden Stairs Giving Unique, Warm Look to Modern...



Concrete Porch Steps | Concrete Floor Stain | Concrete...



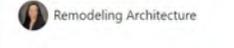
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Architect And Interior... Remodeling Architecture



Architect And Interior... Remodeling Architecture



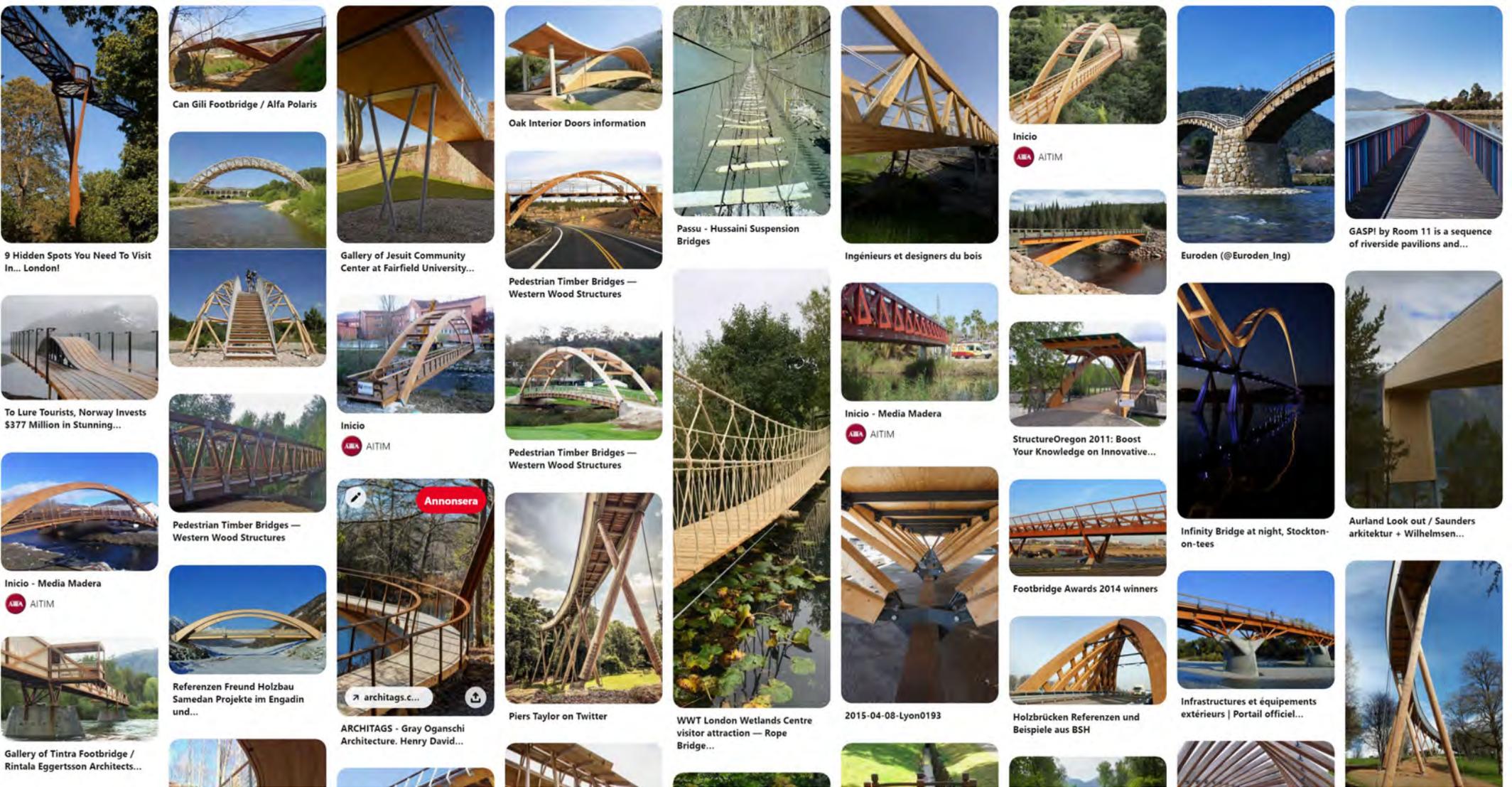
Architect And Interior... Remodeling Architecture



Architect And Interior... Remodeling Architecture



Architect And Interior... Remodeling Architecture



Can Gili Footbridge / Alfa Polaris

Oak Interior Doors information

Gallery of Jesuit Community Center at Fairfield University...

Pedestrian Timber Bridges — Western Wood Structures

Passu - Hussaini Suspension Bridges

Ingénieurs et designers du bois

Inicio  
AITIM

Euroden (@Euroden\_Ing)

GASPI by Room 11 is a sequence of riverside pavilions and...

9 Hidden Spots You Need To Visit In... London!



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Pedestrian Timber Bridges — Western Wood Structures

Inicio - Media Madera  
AITIM

StructureOregon 2011: Boost Your Knowledge on Innovative...

Infinity Bridge at night, Stockton-on-tees

Aurland Look out / Saunders arkitektur + Wilhelmsen...

To Lure Tourists, Norway Invests \$377 Million in Stunning...



Pedestrian Timber Bridges — Western Wood Structures



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architags.c...

Piers Taylor on Twitter

WWT London Wetlands Centre visitor attraction — Rope Bridge...

2015-04-08-Lyon0193

Footbridge Awards 2014 winners

Infrastructures et équipements extérieurs | Portail officiel...

Inicio - Media Madera  
AITIM

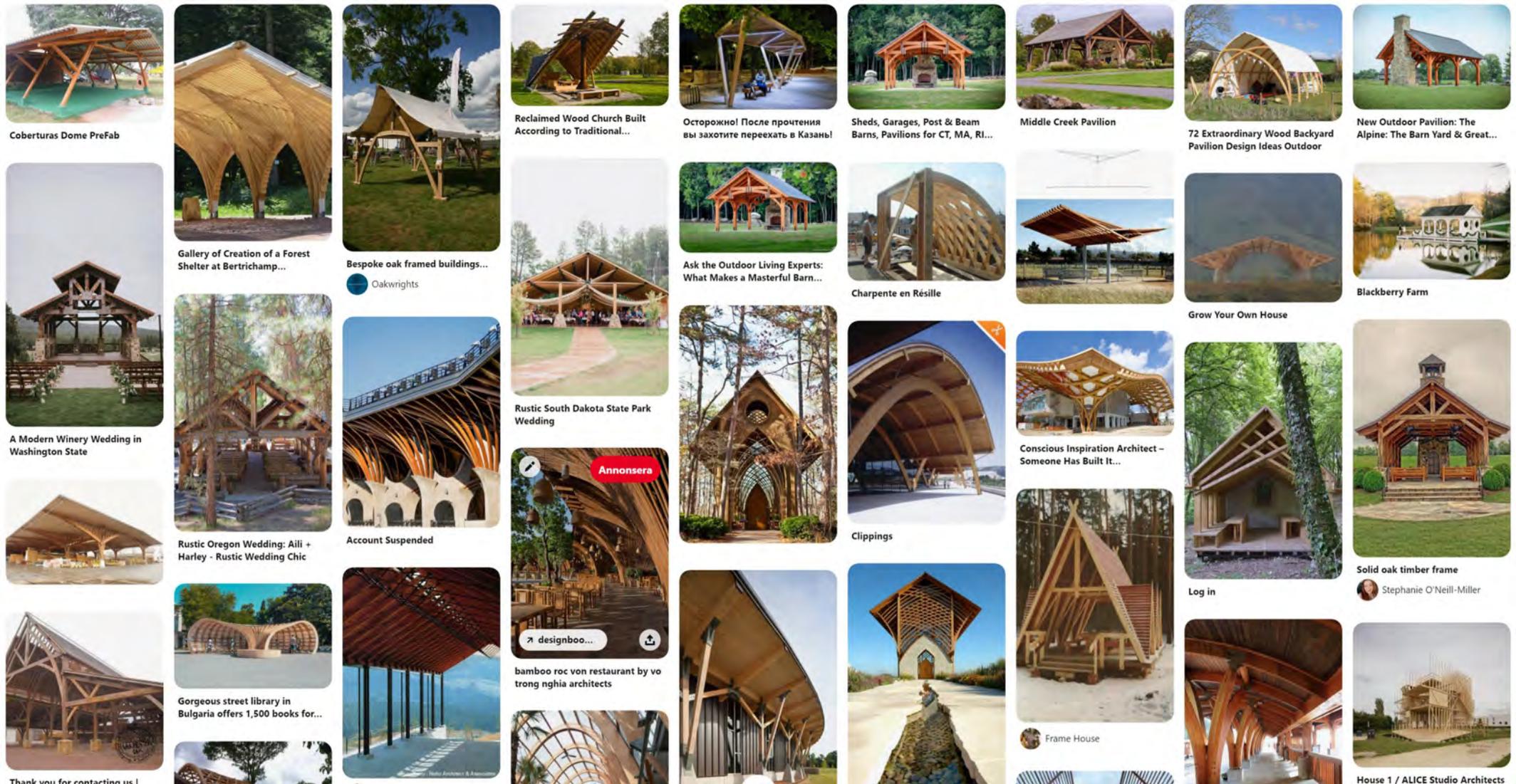


Referenzen Freund Holzbau Samedan Projekte im Engadin und...

ARCHITAGS - Gray Oganschi Architecture. Henry David...

Gallery of Tintra Footbridge / Rintala Eggertsson Architects...





Coberturas Dome PreFab

Gallery of Creation of a Forest Shelter at Bertrichamp...

Bespoke oak framed buildings...  
Oakwrights

Reclaimed Wood Church Built According to Traditional...

Осторожно! После прочтения вы захотите переехать в Казань!

Sheds, Garages, Post & Beam Barns, Pavilions for CT, MA, RI...

Middle Creek Pavilion

72 Extraordinary Wood Backyard Pavilion Design Ideas Outdoor

New Outdoor Pavilion: The Alpine: The Barn Yard & Great...

A Modern Winery Wedding in Washington State

Rustic Oregon Wedding: Alli + Harley - Rustic Wedding Chic

Account Suspended

Rustic South Dakota State Park Wedding

Ask the Outdoor Living Experts: What Makes a Masterful Barn...

Charpente en Résille

Conscious Inspiration Architect - Someone Has Built It...

Grow Your Own House

Blackberry Farm

Thank you for contacting us!

Gorgeous street library in Bulgaria offers 1,500 books for...

designboo...

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Clippings

Frame House

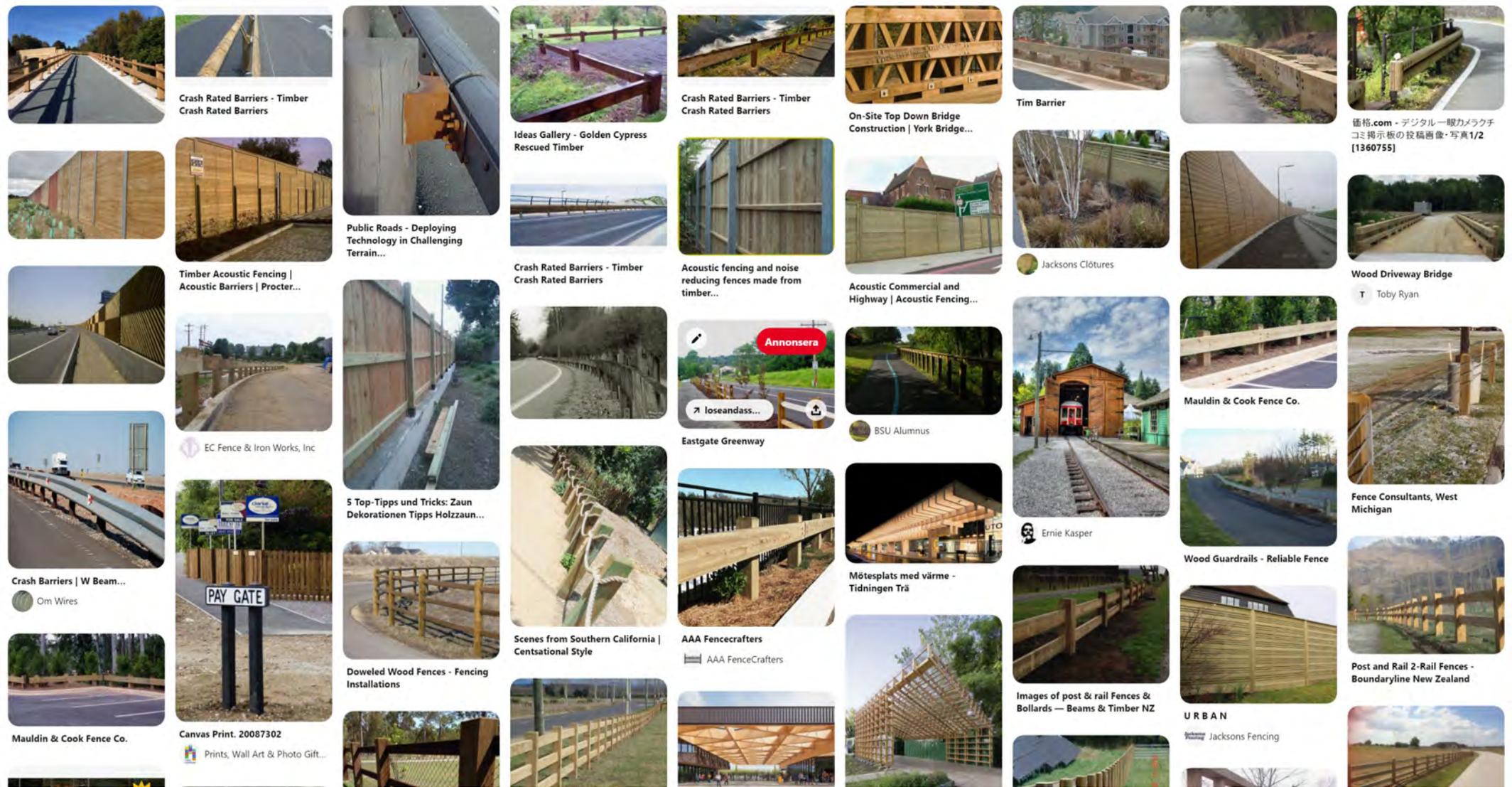
Log in

Solid oak timber frame

Stephanie O'Neill-Miller

bamboo roc von restaurant by vtrong nghia architects

House 1 / ALICE Studio Architects



Crash Rated Barriers - Timber  
Crash Rated Barriers

Ideas Gallery - Golden Cypress  
Rescued Timber

Crash Rated Barriers - Timber  
Crash Rated Barriers

On-Site Top Down Bridge  
Construction | York Bridge...

Tim Barrier

価格.com - デジタル一眼カメラ  
コミュニティの投稿画像・写真1/2  
[1360755]

Timber Acoustic Fencing |  
Acoustic Barriers | Procter...

Crash Rated Barriers - Timber  
Crash Rated Barriers

Acoustic fencing and noise  
reducing fences made from  
timber...

Acoustic Commercial and  
Highway | Acoustic Fencing...

Jacksons Clôtures

Wood Driveway Bridge  
Toby Ryan

EC Fence & Iron Works, Inc

5 Top-Tipps und Tricks: Zaun  
Dekorationen Tipps Holzzaun...

Eastgate Greenway

BSU Alumnus

Ernie Kasper

Mauldin & Cook Fence Co.

Fence Consultants, West  
Michigan

Crash Barriers | W Beam...  
Om Wires

Canvas Print. 20087302  
Prints, Wall Art & Photo Gift...

Doweled Wood Fences - Fencing  
Installations

Scenes from Southern California |  
Centsational Style

AAA Fencecrafters  
AAA FenceCrafters

Mötesplats med värme -  
Tidningen Trä

Wood Guardrails - Reliable Fence

Post and Rail 2-Rail Fences -  
Boundaryline New Zealand

Mauldin & Cook Fence Co.

Images of post & rail Fences &  
Bollards — Beams & Timber NZ

URBAN  
Jacksons Fencing

# What lies in front of us?

## *Wood is a tool to the European Bauhaus and Circular product initiative:*

- More complex and demanding structures (replacing)
- Bifrost: 90% wood, 40 meter, less than 20 ton
- Hybrid constructions, modular and scalable building systems
- Made of standard components of standard dimensions designed to be reused
- Maintenance by substitution of standard components in place



*BIFROST - Bimodulär Formbar RObuSt Träbro*  
<https://vimeo.com/768613164/332322d593>

# Challenges

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- Why don't we use more?
- Why is it often used incorrectly?

# *-We don't use treated wood because it is toxic!*

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- Treated wood is often mistaken for being toxic and high risk but that is not true anymore
- Treated wood is safe!
  - I would argue that it is safer than most comparable building materials
  - It has been tested according to BPR
  - Production follows IED



*Treated wood has undeservedly bad reputation*

# Resent development of ecolabels

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Going from chemical risk reduction to Life Cycle approach

Svanen eco label is based upon ISO 14024 and a holistic sustainable model

- Svanen accepts treated wood since it gives local wood products very long service life and is a sustainable good choice
- Treated wood is also getting good ratings in most eco-label-systems for building materials
- Waste from treated wood is non hazardous waste according to Waste Directive



# Learning to use wood

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- Using wood requires a new building systems and technics
- Complexity requires cooperation
  - policymakers, specifiers, architects, wood industry, construction, property management, and users
- Further develop wood preservatives and durable wood products
  - Safer, long reliable service life, fit for purpose, circular use, resource efficient
- Funding to increase speed

# Better wood preservatives and fair competition

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- Biocidal Product Regulation, BPR makes biocides safe, and this is good
  - BUT:
  - Development of wood preservatives has become expensive, and the risk is high
  - Misses the sustainability costs of alternatives (consequences of exclusion)
- Treated wood has an unfair disadvantage
  - Treated wood competes with other materials that is not regulated by BPR
  - Same substance, same risk but not designed to be a biocide has no restrictions and could have
- More costly
- Slowing down R&D and reducing investments
- Unfair competition with other competing building materials
- Wood not fit for purpose
- Suboptimizing
- Un-sustainable decision

# Risk for Backlash for Wood

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- European wood species without preservation is not competitive and is less sustainable
- Using more wood is good, but using it incorrectly is not
- We need to learn more and educate people about the proper use of wood



*The collapsed Tretten bridge in Norway could be used as an argument for that wood is not working.*

*[https://en.wikipedia.org/wiki/List\\_of\\_bridge\\_failures](https://en.wikipedia.org/wiki/List_of_bridge_failures)*



# We need your Support for durable wood

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- Support the transition to wood by development, education and implementation
- Reduce bureaucracy of BPR and create “sustainable holistic approach in the implementation of the BPR”
- Make competition even between building materials and systems with sustainability benchmarks
- A bold move would be to use EPDs to set carbon restrictions to constructions in the public realm
- A bold move would be to implement “wood first, -strategy”

# In summary

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- Treated wood is safe and sustainable
- Preservative treatment extends functionality of European wood products and service life and makes European wood products competitive
- Treated wood products is an important building block for the sustainable construction in Europe

# Thank You!

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## Fredrik Westin

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General secretary of the Nordic Wood Preservation Council  
Member of the Executive Committee of WEI

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*Disclaimer: This presentation is the view of the presenter and not necessary the public position of the WEI-IEO*