



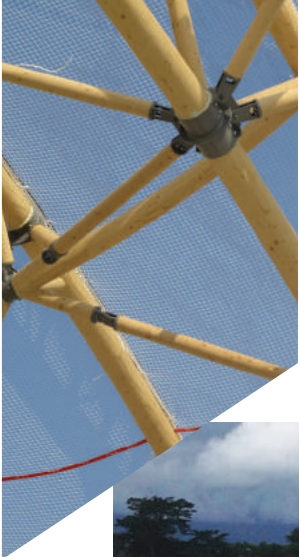
Résix®



A new concept of timber construction
A new vision of wood construction
High performance connection

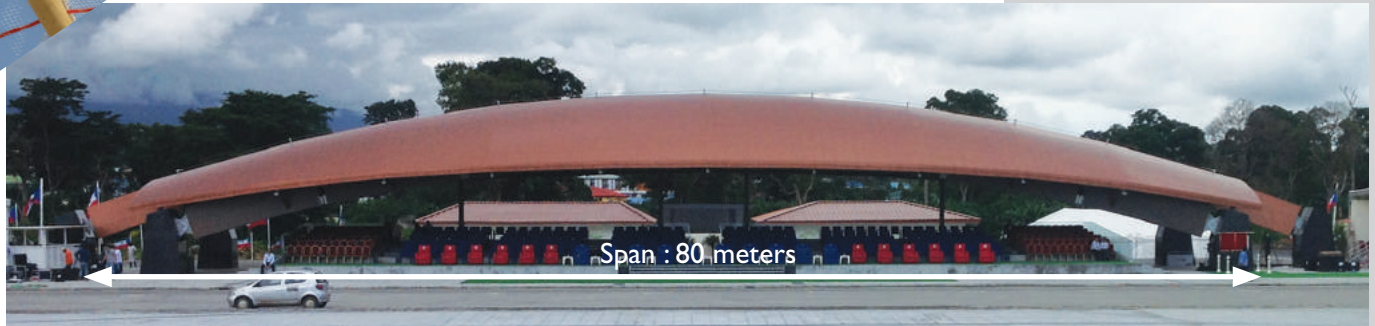


SIMONIN
Wood Solutions



Any types of constructions

- Large structures and resumption of major efforts



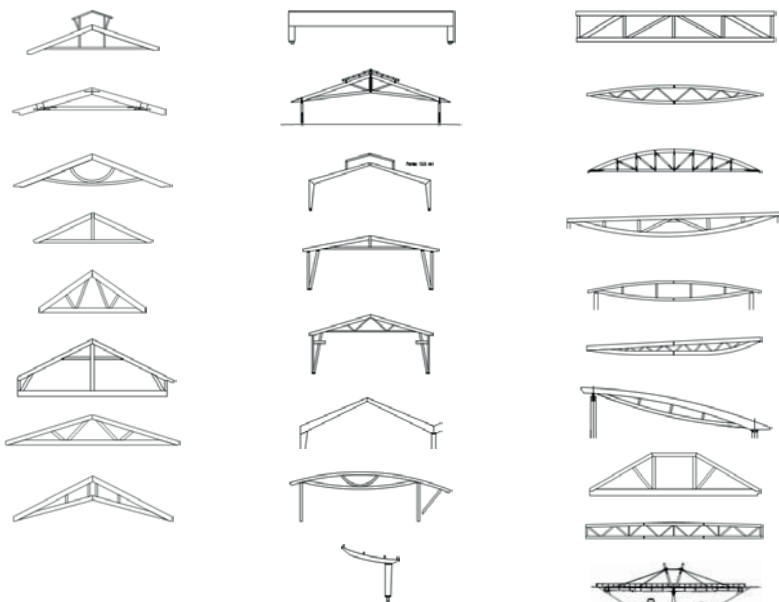
- Outdoor structures

- Housing, Hotels, Swimming pools ...

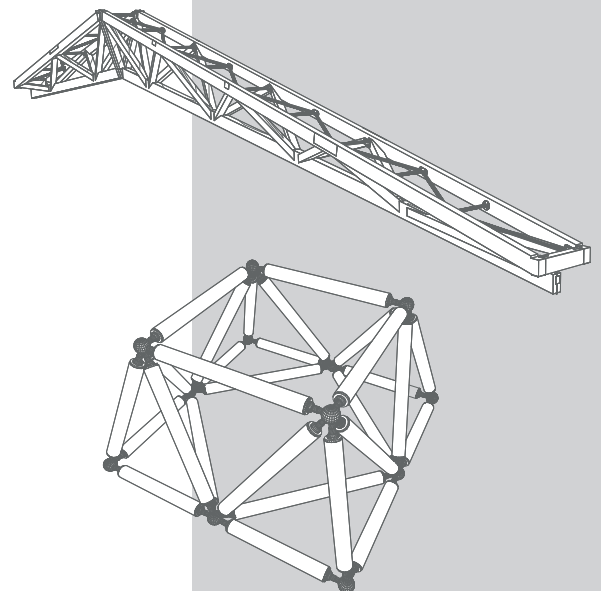


Any types of structures

- 2D structures



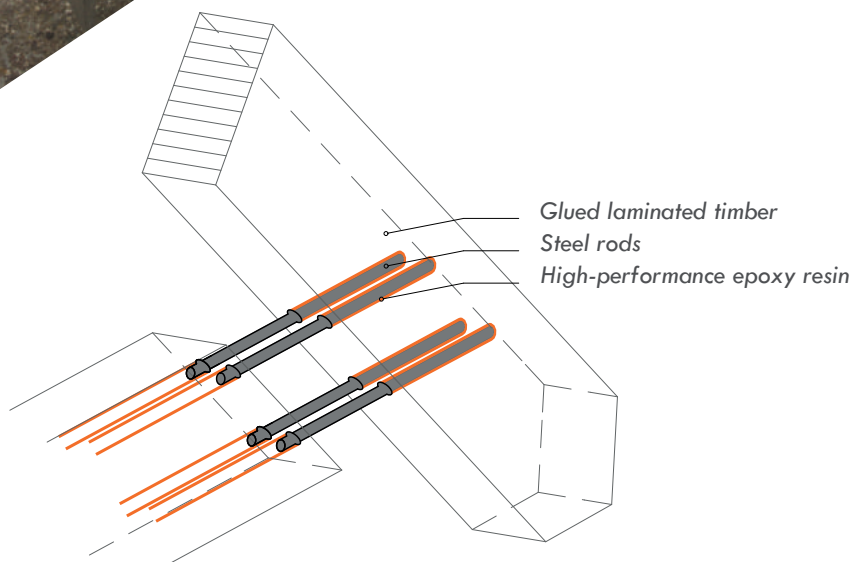
- 3D structures



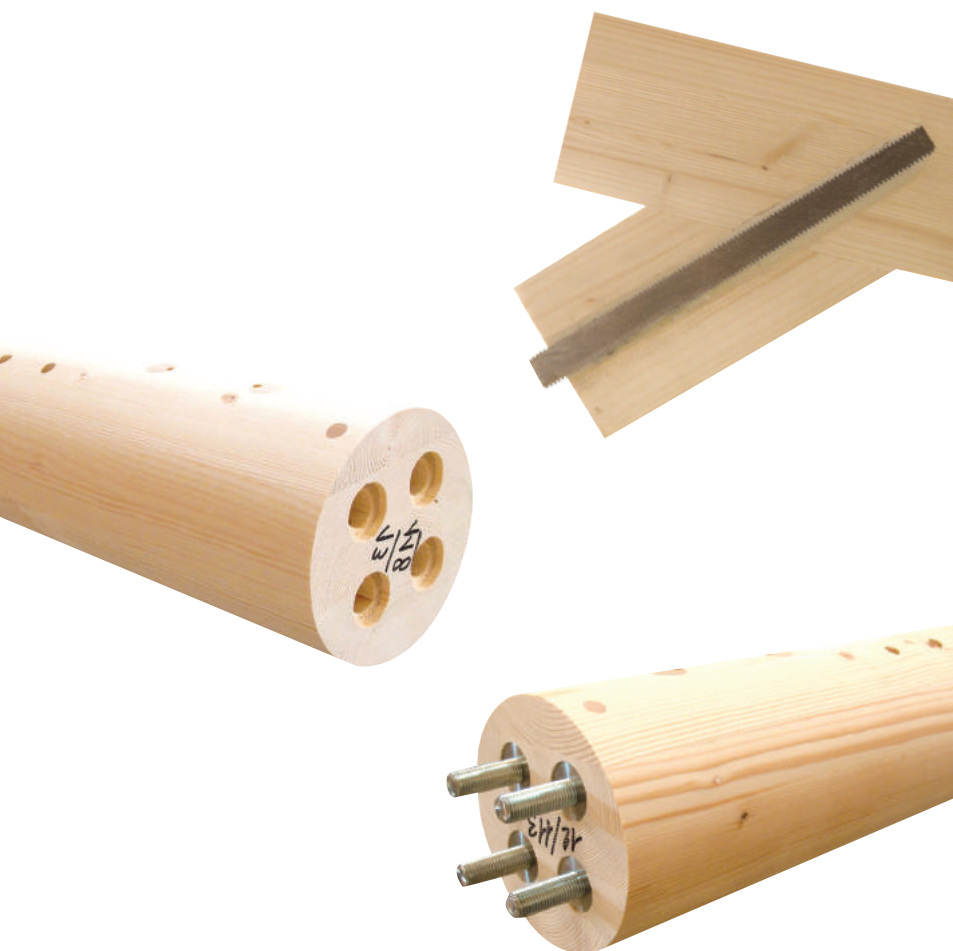


The Resix system

• The connection system



The system has obtained a French technical approval
« Avis Technique AT Goujons collés RBF »





Stiffness assured

- **100% of efficiency**

- Optimized cross section thanks to high performance joints

Glued in length and structural capacity

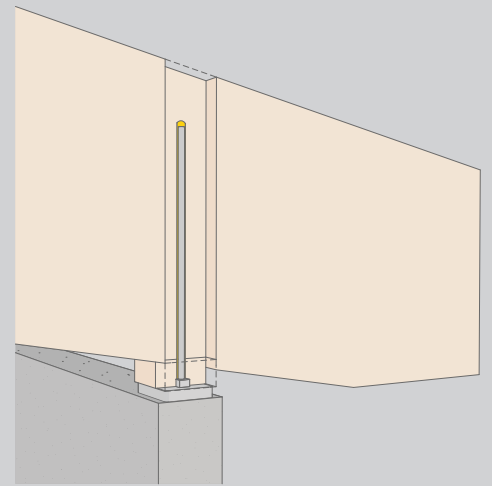
Example : 2x3 rods $\varnothing 16$ mm - pull out resistance

Glued-in length (mm)				
	200	300	400	
	Mean ultimate strength	54 T	72 T	73 T
	Characteristic strength	37 T	46 T	53 T
Design strength EC5 ($k_{mod} = 0,8$)	23 T	28 T	33 T	

- **Continuity of the section**

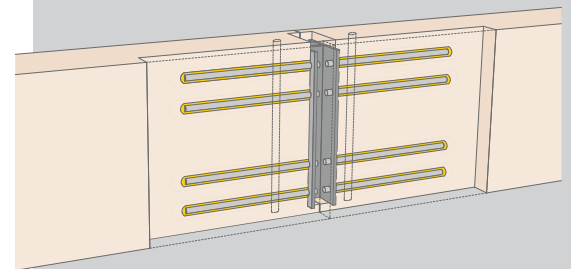
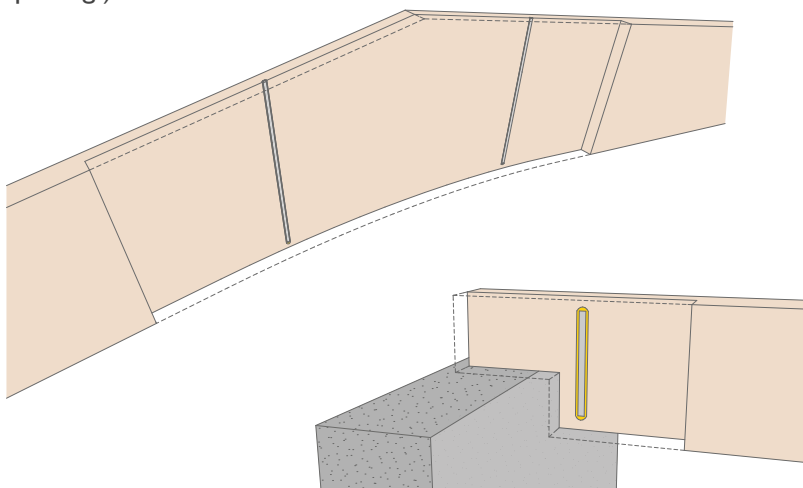
- Great freedom to position splice connections (See page 7)
- Dismountable / reassembly
- Dis-assembly

- **Compression at support**



- **Tension perpendicular to grain mastered**

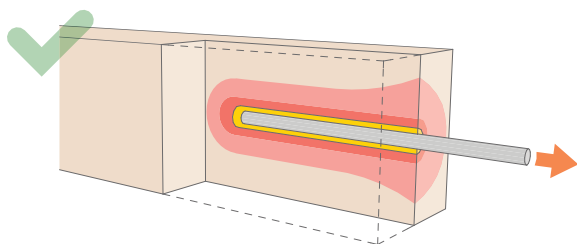
- Reduced cross-section
- Connection with crossed rods (transversal reinforcement against splitting)





• **Equal distribution of the stress**

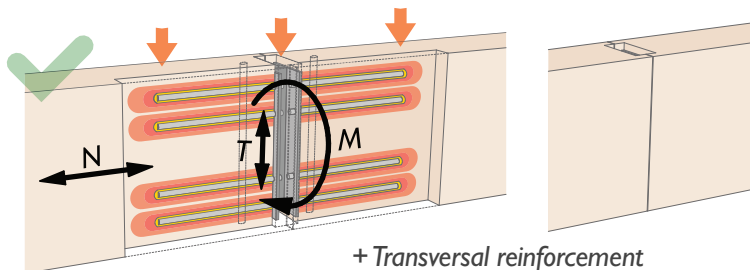
Resix connection
Tension or compression



Totally gap free, instantaneous absorbance of stress, no induced deflection

• **Exceptional mechanical strength**

Resix connection
Moment resistant

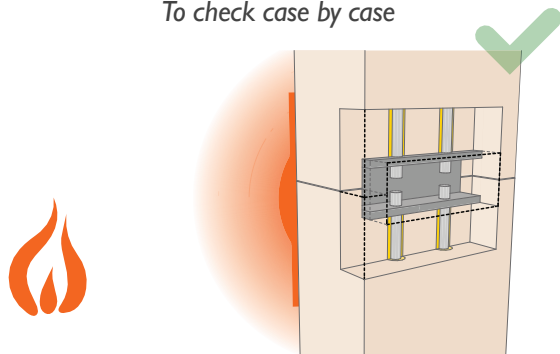


+ Transversal reinforcement

Equal and instantaneous distribution of stress along the whole rod (momenty, traction and shear)

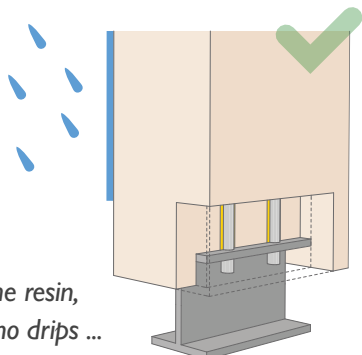
• **Controlled fire resistance**

Resix connection protected by the timber
To check case by case



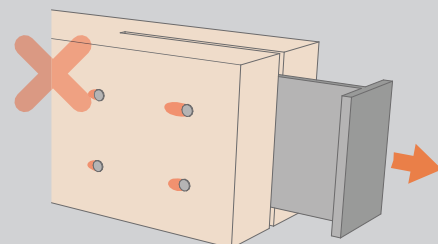
• **Weather protection**

Resix connection



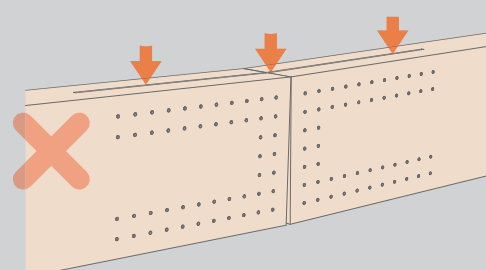
Rods protected by the resin, no water penetration, no drips ...

Traditional connection
Tension or compression



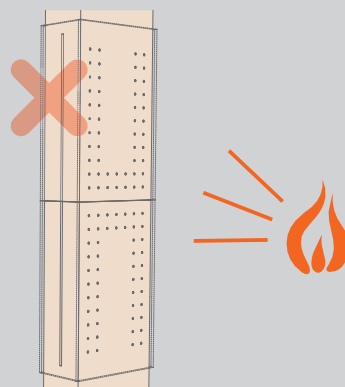
Assembly gap necessary
Deflection

Traditional connection
Moment resistant

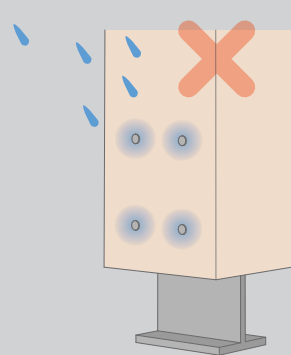


Deflection due to assembly gap

Traditional connection
To be protected systematically



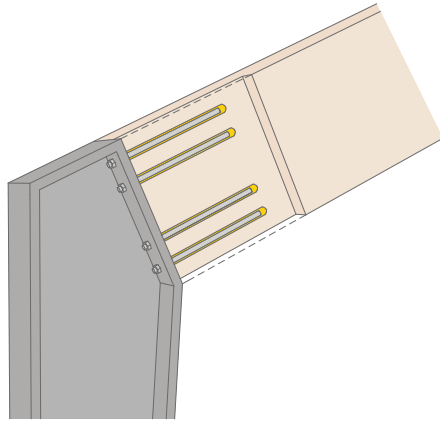
Traditional connection



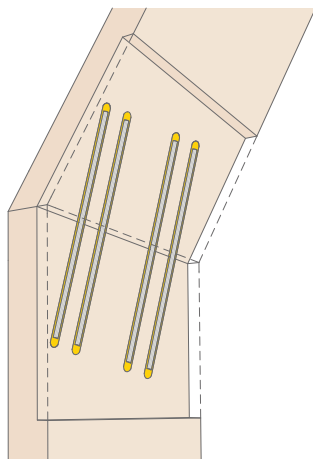


Invisible and elegant

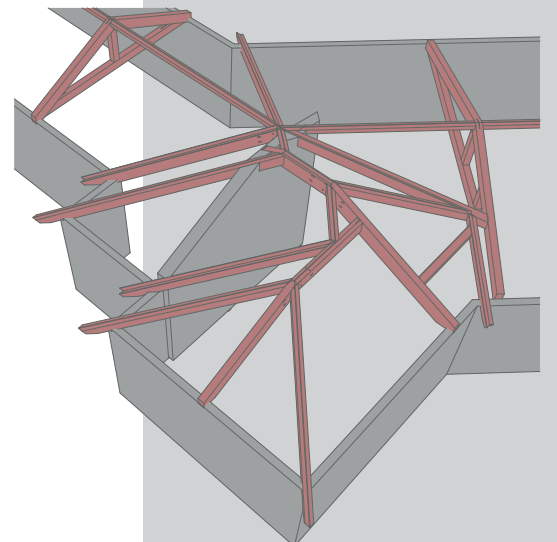
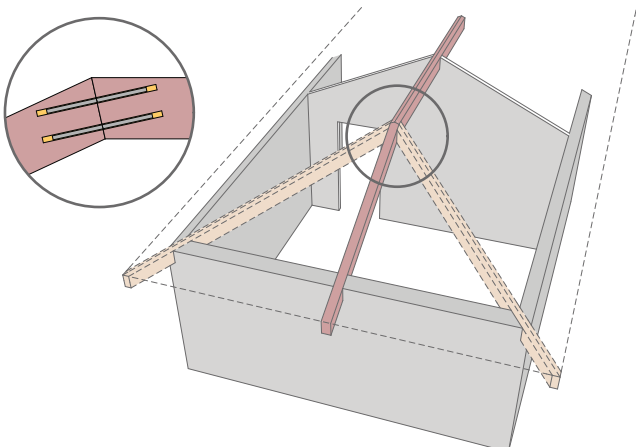
- Connection Timber / Steel



- Connection Timber / Timber



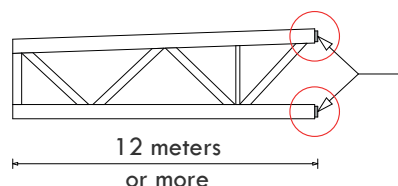
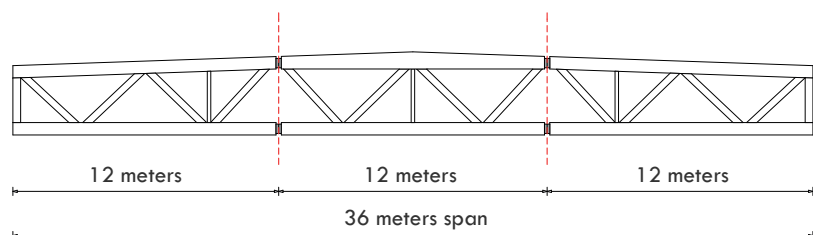
Streamlined structure



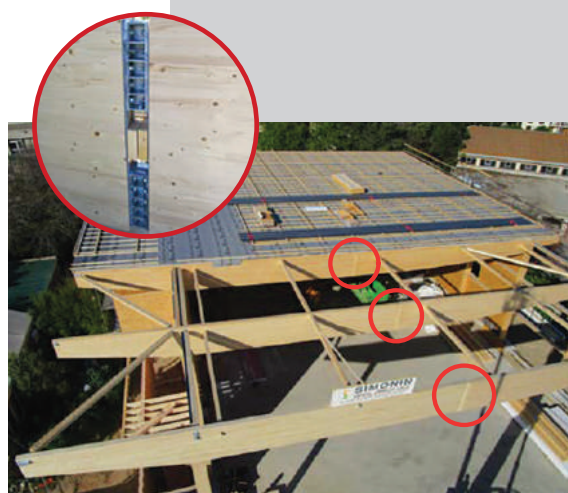
Simplified logistics

- Effectiveness of Resix continuity joints

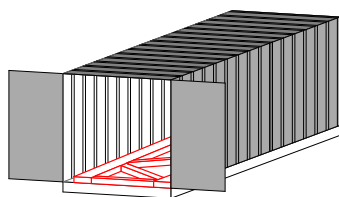
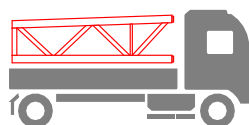
Example :



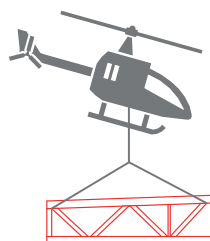
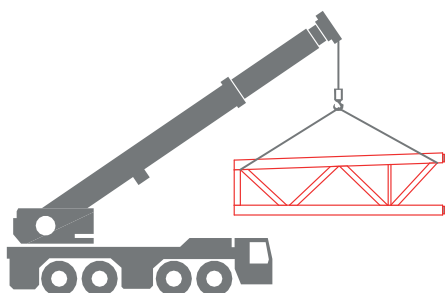
Continuity joints :
visible or no visible



- Adapted to transport solution



- Adapted to site assembly



A proven technology

Used in many kind of projects (industrial, public, athletic, special projects, private and community housing...), Résix® as able to demonstrate its advantages and performance .

A full range of testing has been carried out for it's application : unitary tests, large scale tests, moment resistant connection tests, fire tests, dynamic tests, service class ... in different laboratories (FCBA, CSTB, ENSTIB, CRITTBOIS) . All the proof of performance has enabled us to obtain the certificate **Avis Technique** (French technical approval) describing the characteristics of this glued-in rods system :

- Strength in tension and compression more than 100 Tons
- Controlled behavior for fire resistant connections
- Excellent behavior after dynamic stress (earthquake)
- Excellent aging of the resin

Over 15 ears of experience

Our technical department is available to design and optimize your projects with the benefits of the Résix® system.



SIMONIN
Wood Solutions