



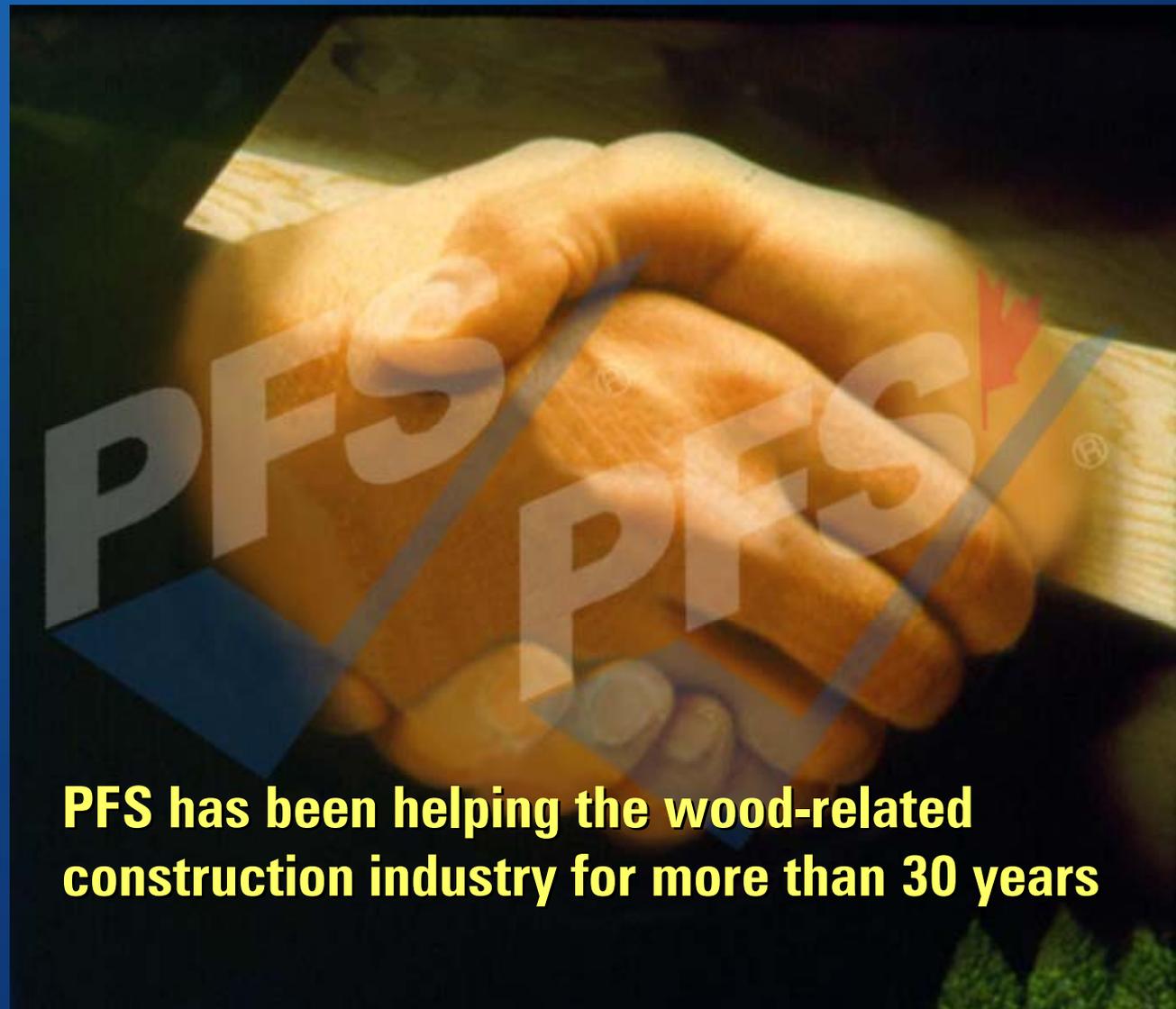
PFS Corporation



***Assurance
You Can Build On®***



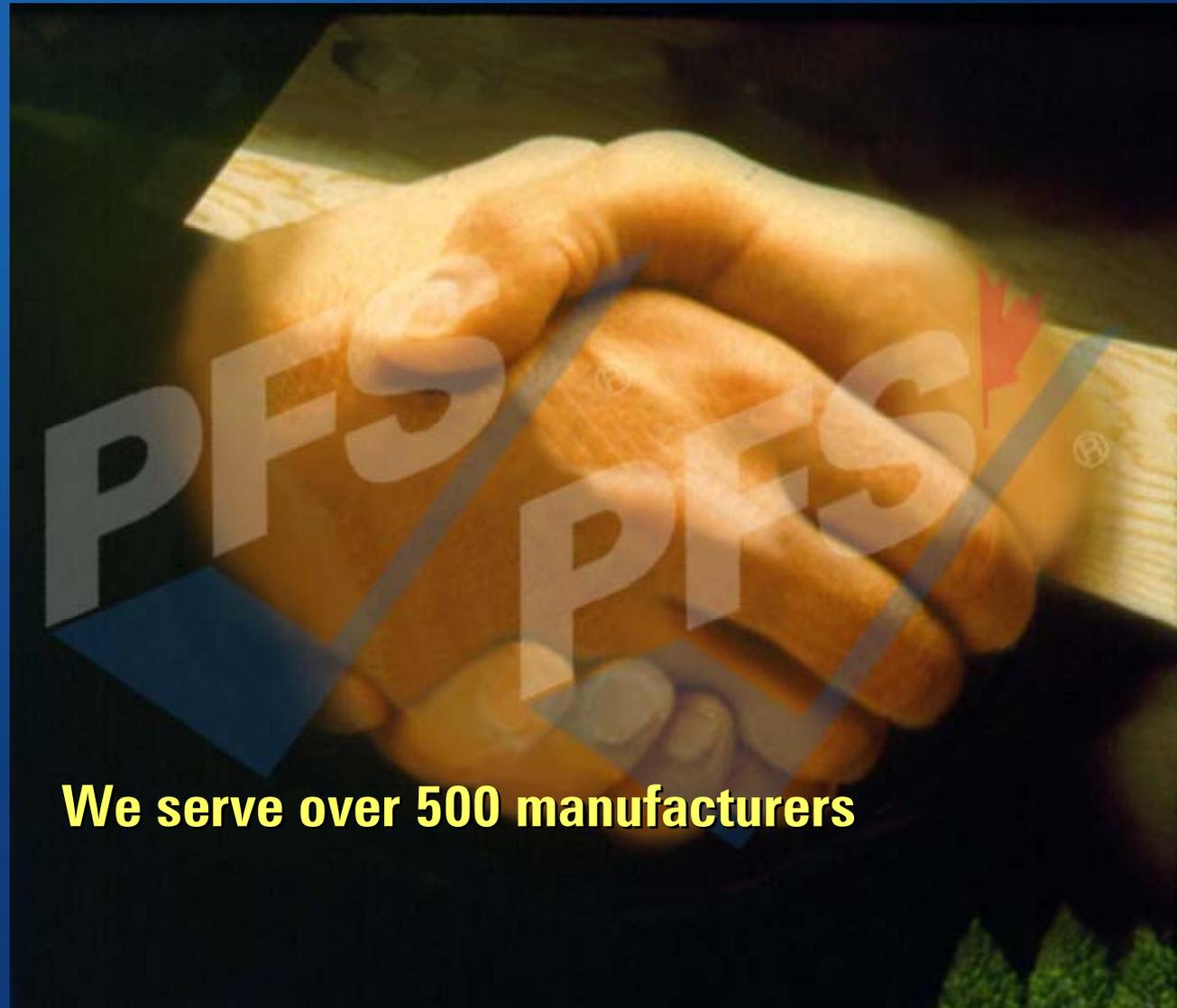
**Assurance
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**PFS has been helping the wood-related
construction industry for more than 30 years**



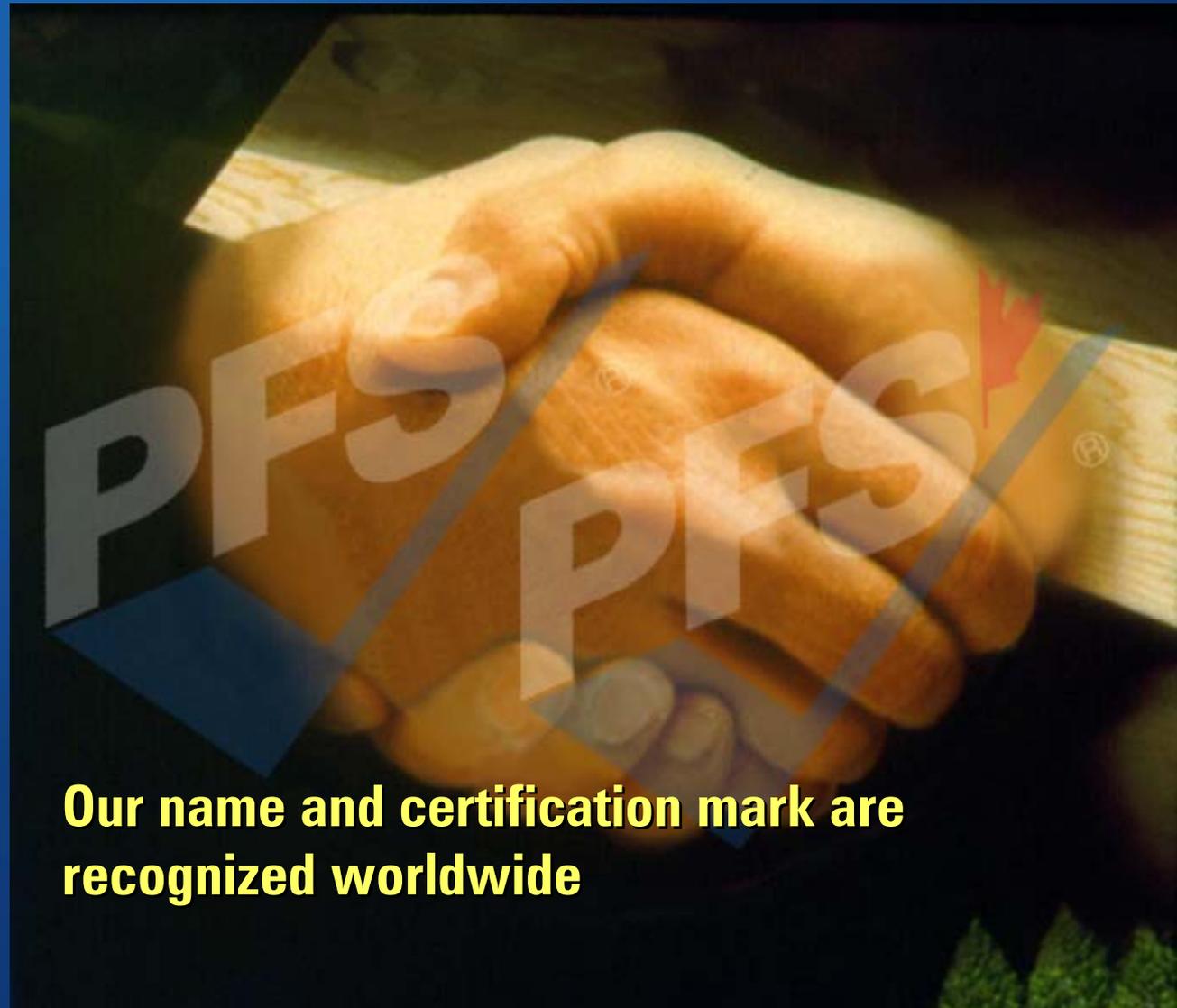
**Assurance
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We serve over 500 manufacturers



**Assurance
You Can Build On®**



**Our name and certification mark are
recognized worldwide**



**Assurance
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Your Independent Quality Assurance Agency





**Assurance
You Can Build On®**



Your Independent Quality Assurance Agency

What we do:

An independent, third-party agency



**Assurance
You Can Build On®**



Your Independent Quality Assurance Agency

What we do:

An independent, third-party agency

**Evaluate and certify many types of products
and structures used in construction to help
our clients meet required quality standards**



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Your Independent Quality Assurance Agency

What we do:

An independent, third-party agency

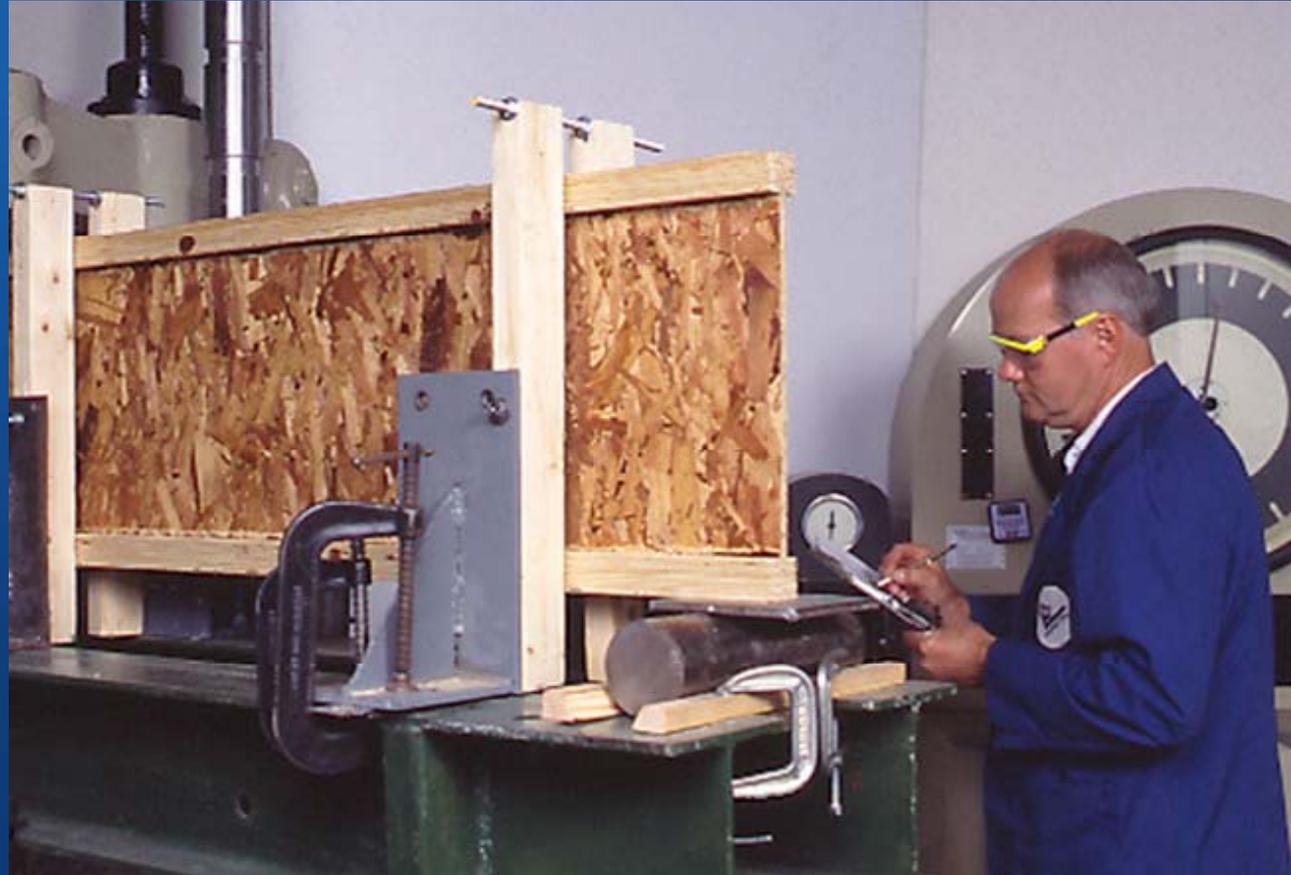
Evaluate and certify many types of products and structures used in construction to help our clients meet required quality standards

Provide a variety of related services to the industry, such as consulting, training, and information



**Assurance
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Engineered Wood (EW)





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Engineered Wood (EW)

Our Services:

**Evaluate quality control programs and
product standards for manufacturers of EW**



**Assurance
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Engineered Wood (EW)

Our Services:

Evaluate quality control programs and product standards for manufacturers of EW

Evaluate and certify EW products



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Engineered Wood (EW)

Our Services:

Evaluate quality control programs and product standards for manufacturers of EW

Evaluate and certify EW products

Most EW products and components made in North America bear the PFS mark



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Structural Insulated Panels (SIP)





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Structural Insulated Panels (SIP)

We:

**Work with most SIP manufacturers who
require building code approval**





**Assurance
You Can Build On®**

Structural Insulated Panels (SIP)

We:

**Work with most SIP manufacturers who
require building code approval**

**Perform a large number of different tests to
certify that these products meet the model
codes that apply to them**





**Assurance
You Can Build On®**

Structural Insulated Panels (SIP)

We:

Work with most SIP manufacturers who require building code approval

Perform a large number of different tests to certify that these products meet the model codes that apply to them

Provide required third-party quality assurance inspection and training for SIP manufacturers

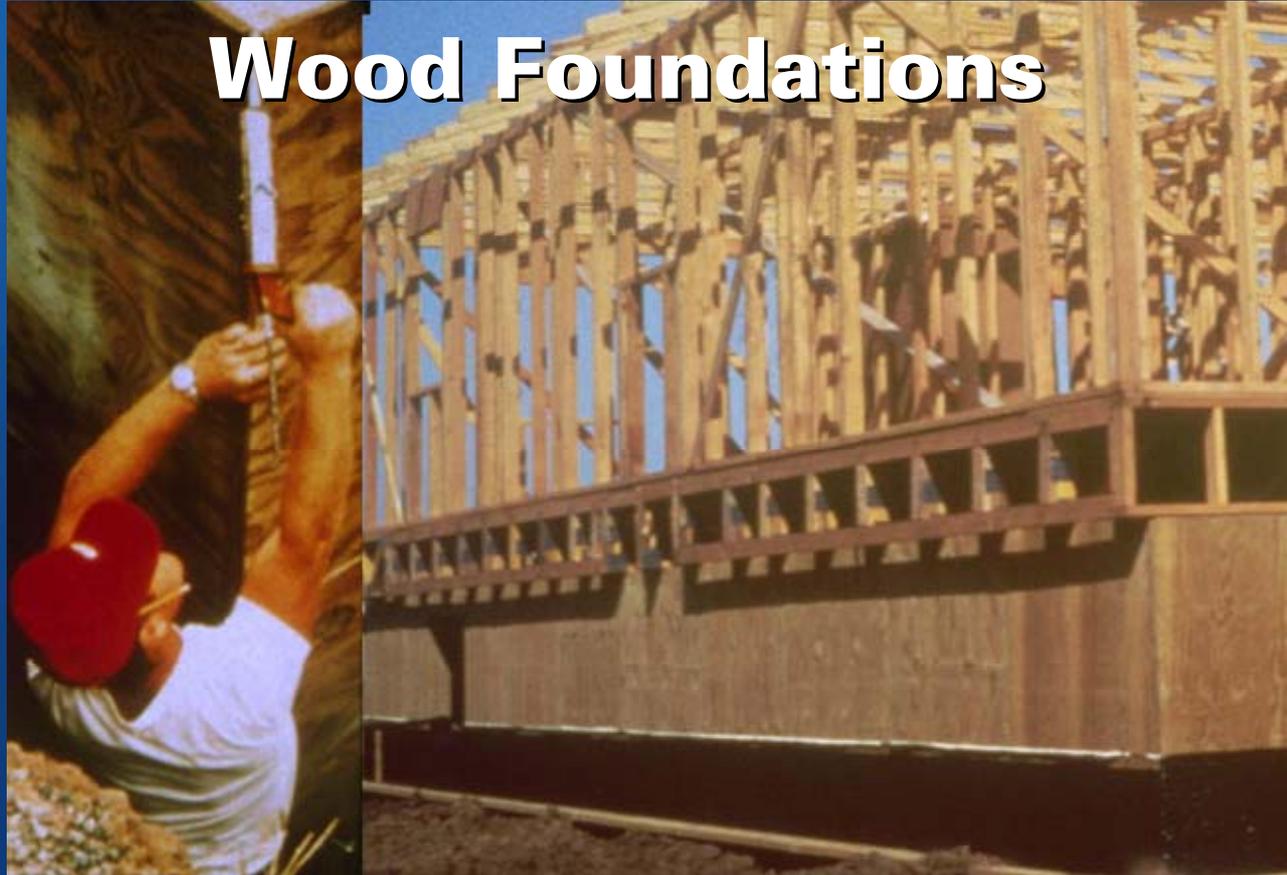




**Assurance
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Treated Wood /

Wood Foundations





**Assurance
You Can Build On®**



Treated Wood / Wood Foundations

**Certification of treated wood, both lumber
and plywood**





**Assurance
You Can Build On®**



Treated Wood / Wood Foundations

**Certification of treated wood, both lumber
and plywood**

**We provide quality control services for
fabricators of panels used for permanent
foundations**



**Assurance
You Can Build On®**



Treated Wood / Wood Foundations

**Certification of treated wood, both lumber
and plywood**

**We provide quality control services for
fabricators of panels used for permanent
foundations**

**We are accepted and audited by ALSC as a
provider of these services**



**Assurance
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Factory-built Construction





**Assurance
You Can Build On®**



Factory-built Construction

**PFS is the leading third-party agency for
factory-built construction, and a key agency
for HUD Code homes**





**Assurance
You Can Build On®**



Factory-built Construction

PFS is the leading third-party agency for factory-built construction, and a key agency for HUD Code homes

We are audited, certified and recognized by the federal government and over 40 states to provide in-plant inspection and design approval



**Assurance
You Can Build On®**



Factory-built Construction

PFS is the leading third-party agency for factory-built construction, and a key agency for HUD Code homes

We are audited, certified and recognized by the federal government and over 40 states to provide in-plant inspection and design approval

We also provide on-site inspection for residential and commercial buildings



**Assurance
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Fire Testing





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Fire Testing

PFS is one of the few nationally-recognized fire test laboratories that specialize in fire testing for the wood products industry



**Assurance
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Fire Testing

PFS is one of the few nationally-recognized fire test laboratories that specialize in fire testing for the wood products industry

We test interior finish products for flame spread



**Assurance
You Can Build On®**



Fire Testing

PFS is one of the few nationally-recognized fire test laboratories that specialize in fire testing for the wood products industry

We test interior finish products for flame spread

We test walls, floor-ceiling assemblies, and doors for fire resistance



**Assurance
You Can Build On®**



Fire Testing

PFS is one of the few nationally-recognized fire test laboratories that specialize in fire testing for the wood products industry

We test interior finish products for flame spread

We test walls, floor-ceiling assemblies, and doors for fire resistance

Our staff includes experienced fire protection engineers who understand the unique fire code requirements of wood construction



Assurance
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Adhesive and Sealant Testing





**Assurance
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Adhesive and Sealant Testing

We test adhesives and sealants for conformance to the national, international and federal standards that apply to them





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Adhesive and Sealant Testing

We test adhesives and sealants for conformance to the national, international and federal standards that apply to them

We also test adhesives for use on treated lumber





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Adhesive and Sealant Testing

We test adhesives and sealants for conformance to the national, international and federal standards that apply to them

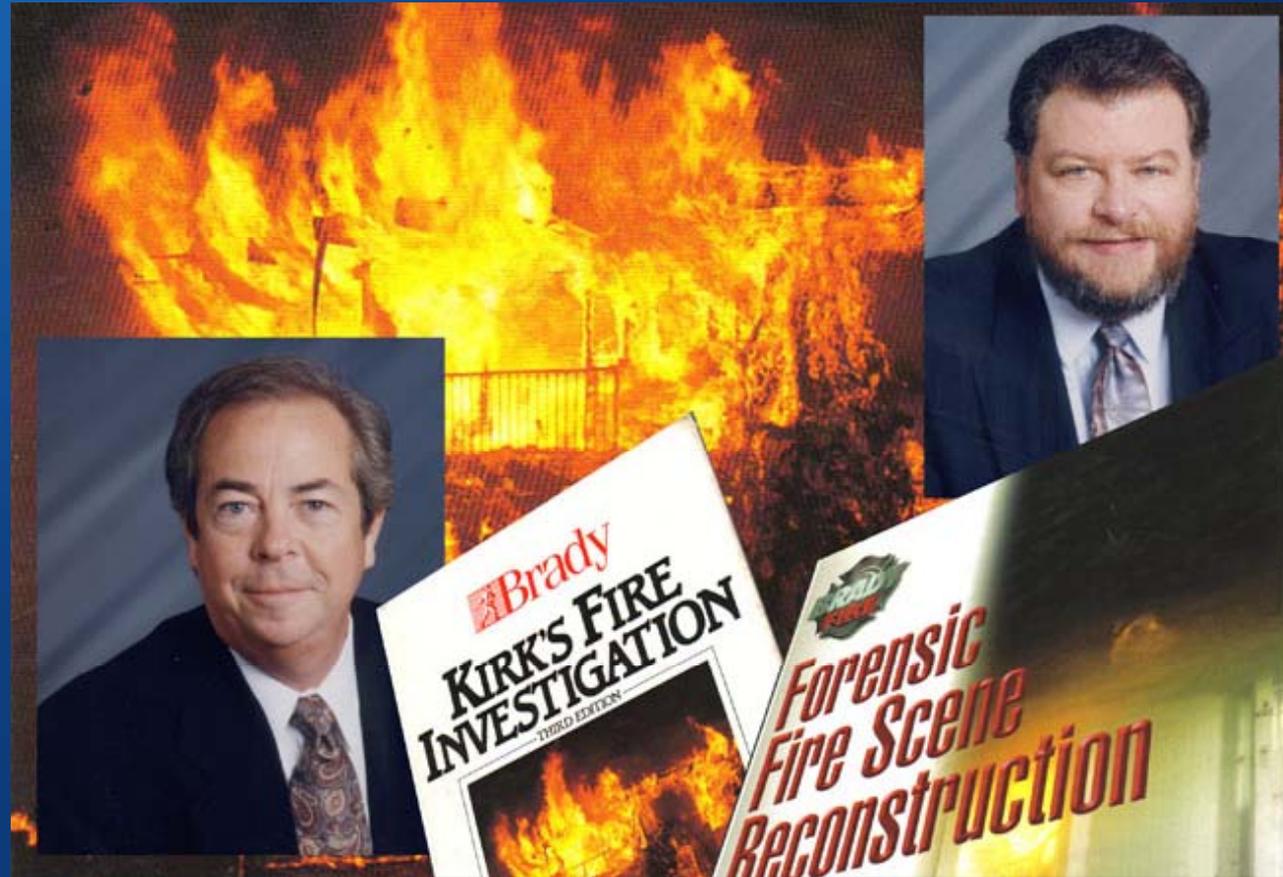
We also test adhesives for use on treated lumber

We help adhesive manufacturers do R&D testing and evaluation to meet ASTM, CSA, FHA and HUD criteria



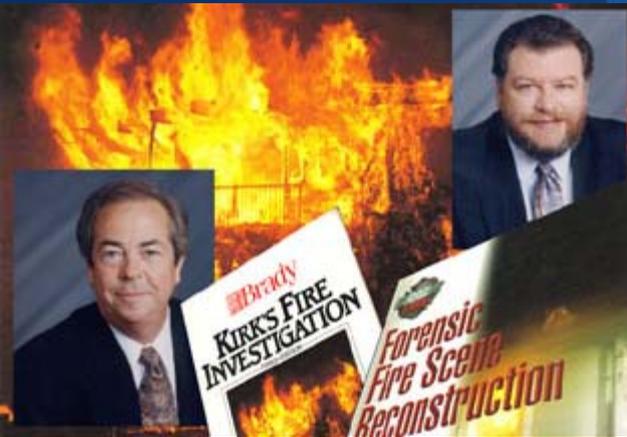
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Forensics





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Forensics

We provide legal consultation and expert witness services in:

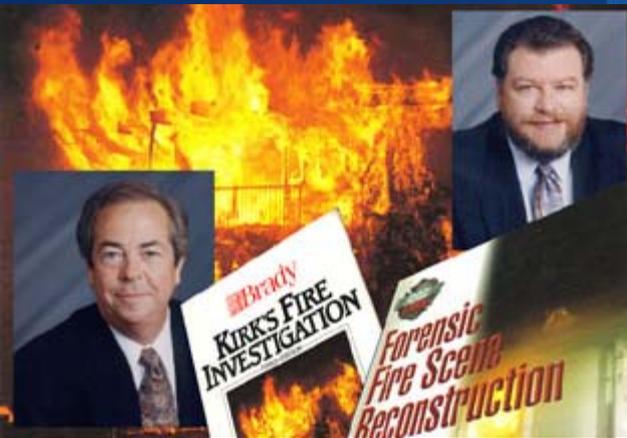
Fire cause and origin

Forensic examination of building components and devices alleged to be the cause of a fire

Evaluate existing designs for building code compliance



**Assurance
You Can Build On®**



Forensics

We provide legal consultation and expert witness services in:

Fire cause and origin

Forensic examination of building components and devices alleged to be the cause of a fire

Evaluate existing designs for building code compliance

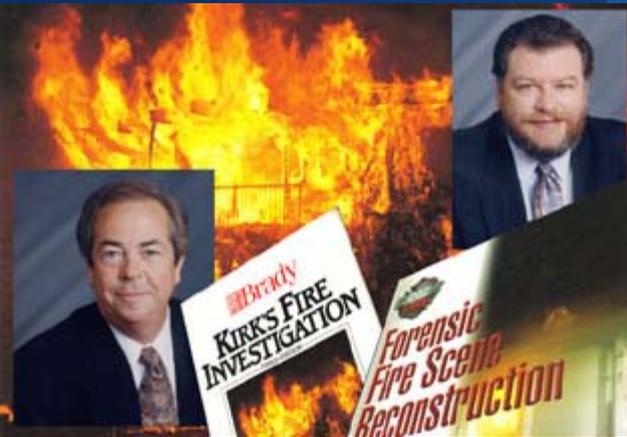
Analysis of wood structures or components that have failed in use

Fire protection analysis of buildings that have had fires

Fire protection analysis of proposed building designs



**Assurance
You Can Build On®**



Forensics

We provide legal consultation and expert witness services in:

Fire cause and origin

Forensic examination of building components and devices alleged to be the cause of a fire

Evaluate existing designs for building code compliance

Analysis of wood structures or components that have failed in use

Fire protection analysis of buildings that have had fires

Fire protection analysis of proposed building designs

Analysis of proposed building designs for building code compliance

Building code compliance analysis for many types of post-construction building use products



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Electronic Plan Review





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Electronic Plan Review

**Leading edge in development of electronic
plan review**





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Electronic Plan Review

**Leading edge in development of electronic
plan review**

**We specialize in developing off-the-shelf
software solution to common sense plan
review**



**Assurance
You Can Build On®**



Electronic Plan Review

Leading edge in development of electronic plan review

We specialize in developing off-the-shelf software solution to common sense plan review

We consult with factory-built housing clients in developing systems that work effectively for the client and PFS



**Assurance
You Can Build On®**



Electronic Plan Review

Leading edge in development of electronic plan review

We specialize in developing off-the-shelf software solution to common sense plan review

We consult with factory-built housing clients in developing systems that work effectively for the client and PFS

We consult with state regulatory agencies in developing software-driven solutions and in creating hardware for those solutions



**Assurance
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Information and Technology Transfer





**Assurance
You Can Build On®**

Information and Technology Transfer

**We help our client industries stay informed
by publishing a variety of informational
documents, references and educational
materials**





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Conclusion

This has been an overview of our most common services.

We have a staff of architects, engineers, fire specialists, wood scientists and laboratory technicians helping clients in many other ways as well.

We also maintain advanced testing and research facilities.

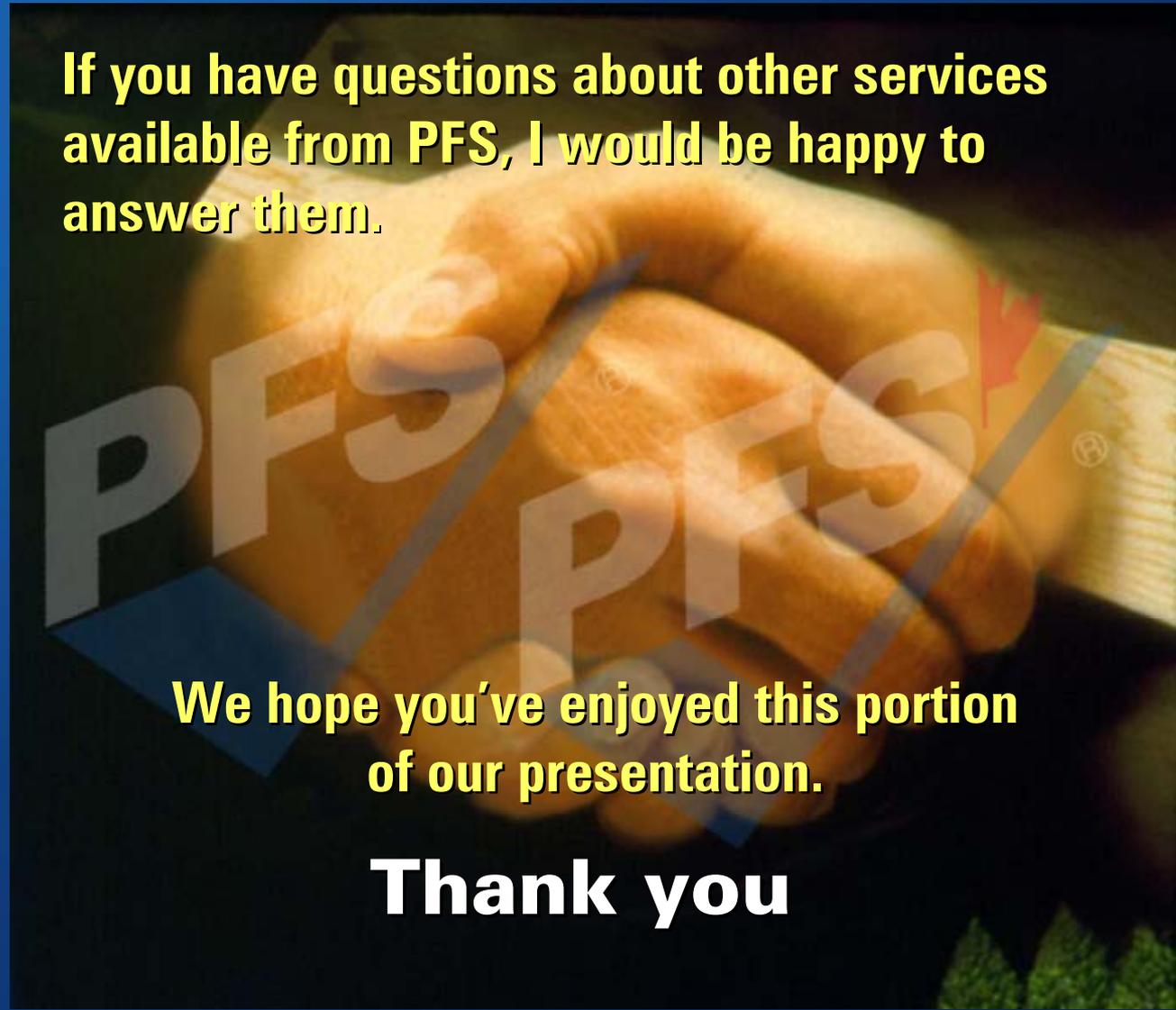


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If you have questions about other services available from PFS, I would be happy to answer them.

We hope you've enjoyed this portion of our presentation.

Thank you



A presentation on Engineered Wood follows on the next slide.

If continuing - proceed when ready.



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The Problem . . .





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The Problem . . .

People have been building with wood for thousands of years. But now we've got a big problem.





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The Problem . . .

People have been building with wood for thousands of years. But now we've got a big problem.

The kinds of trees that we traditionally used for construction - the big, tall, wide old-growth trees - are no longer available.



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The Problem . . .

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In a few decades this kind of wood may become so unavailable and so expensive that we may simply not be able to build with it at all anymore. And we may not want to anyway, out of concerns for the environment.



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The Problem . . .

People have been building with wood for thousands of years. But now we've got a big problem.

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In a few decades this kind of wood may become so unavailable and so expensive that we may simply not be able to build with it at all anymore. And we may not want to anyway, out of concerns for the environment.

That's the problem. But there's a solution.



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Engineered Wood





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Engineered Wood

Lower Quality Wood, High Quality Products

Uses Less Wood

Less Energy-Intensive

Uses More of The Tree

These products use lower quality wood to create high quality products. Instead of old-growth timber, it can be made with relatively small trees that can be grown, harvested, and replaced in a relatively short time.



**Assurance
You Can Build On®**



Engineered Wood

Lower Quality Wood, High Quality Products

Uses Less Wood

Less Energy-Intensive

Uses More of The Tree

These products use less wood fiber to do the same job.



**Assurance
You Can Build On®**



Engineered Wood

Lower Quality Wood, High Quality Products

Uses Less Wood

Less Energy-Intensive

Uses More of The Tree

They're less energy-intensive to manufacture.



**Assurance
You Can Build On®**



Engineered Wood

Lower Quality Wood, High Quality Products

Uses Less Wood

Less Energy-Intensive

Uses More of The Tree

And they use more of the tree, including particles, flakes, strands, veneer - so there's much less waste.



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What, exactly, IS **Engineered Wood?**





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What, exactly, IS Engineered Wood?

Composite Material

Cost-Effective

High Performance

Parts of wood - strands, chips, veneer, etc. - are processed and made into a composite material using adhesives, resins, wax, pressure and heat.

Defects such as knots, splits, and checks are engineered out.

Adhesives are formulated for maximum strength, durability and water resistance.





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What, exactly, IS Engineered Wood?

Composite Material

Cost-Effective

High Performance

**Engineered Wood products are the economical
alternative.**



**Assurance
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What, exactly, IS Engineered Wood?

Composite Material

Cost-Effective

High Performance

Best of all, they excel in strength, durability, and ease of handling. And when used according to specified engineering values, they meet the appropriate building codes.



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Applications



Residential

Commercial

Industrial

Public

**Engineered Wood products have many applications
in construction: Residential - Commercial - Industrial
- Public**



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Variety of Products

Plywood

Oriented Strand Board (OSB)

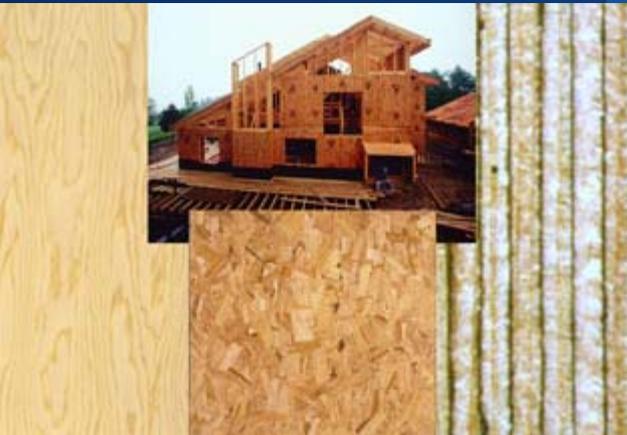
Laminated Veneer Lumber (LVL)



There's a great variety of Engineered Wood Products



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Variety of Products

Plywood

Oriented Strand Board (OSB)

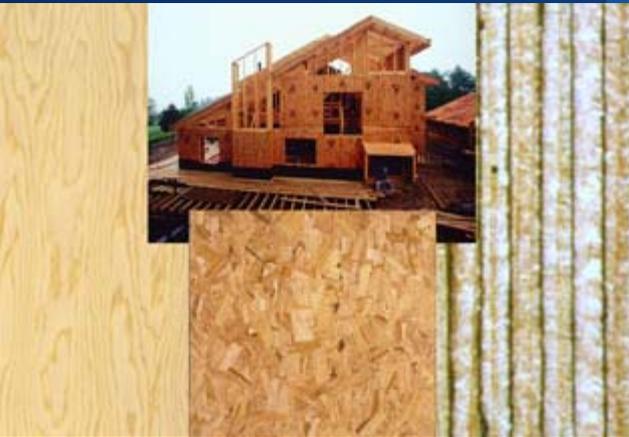
Laminated Veneer Lumber (LVL)

You've probably been familiar with some of them for years, such as plywood and OSB.

These products are strong, versatile, and can be manufactured to meet many different types of needs. They're used for floor, roof and wall sheathing, and as web stock for I-joists.



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Variety of Products

Plywood

Oriented Strand Board (OSB)

Laminated Veneer Lumber (LVL)

Laminated Veneer Lumber uses thin veneers that are held together by code-accepted wet-use, thermosetting adhesives. It's used for scaffold planking, beam and header construction, and flange stock for I-joists.



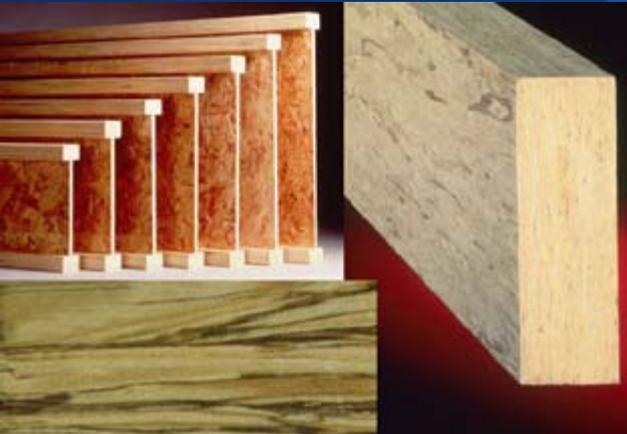
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Other Examples





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Other Examples

I-Joists

Parallel Strand Lumber (PSL)

Laminated Strand Lumber (LSL)

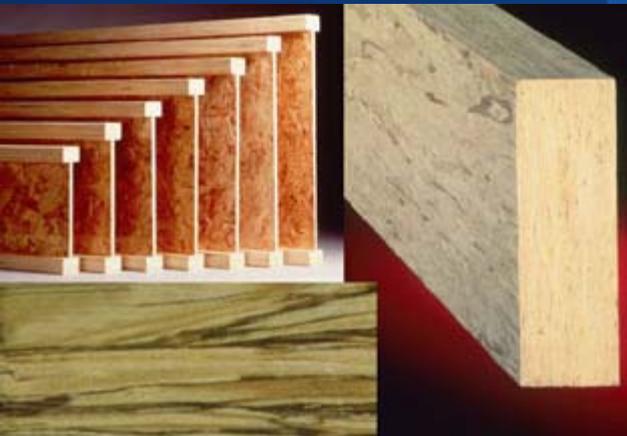
The common I-joist combines plywood or OSB with LVL or sawn wood flanges to deliver outstanding performance as joists and rafters. They can also be used as headers.

They don't crown, shrink, split, warp, twist, or pull away from the subfloor. And they come in lengths of more than 60 feet.

They're lightweight, easy to handle on the job, and strong enough to carry large loads.



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Other Examples

I-Joists

Parallel Strand Lumber (PSL)

Laminated Strand Lumber (LSL)

Parallel Strand Lumber is extremely popular. It's made by gluing together long strands of wood veneer to take advantage of the wood's natural strength. PSL is mainly used for headers and post and beam construction.



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Other Examples

I-Joists

Parallel Strand Lumber (PSL)

Laminated Strand Lumber (LSL)

Laminated Strand Lumber uses long flakes of low-grade species of wood to create high-grade engineered wood products. It's used mainly for band board or rim-joist applications.



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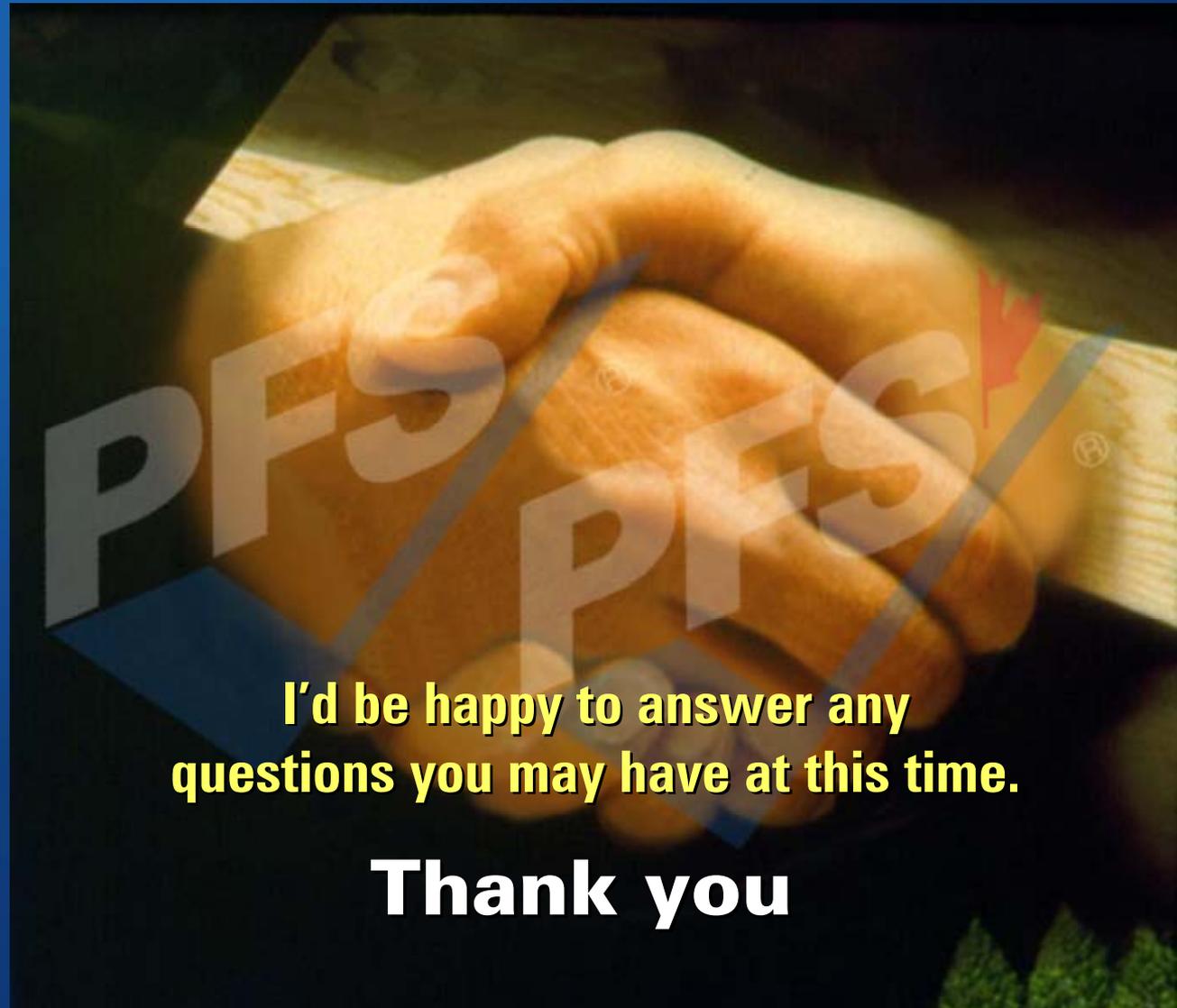
Engineered Wood

Strong, affordable, easy to handle and environmentally sound.

In a nutshell, those are the advantages Engineered Wood offers the construction industry today.



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**I'd be happy to answer any
questions you may have at this time.**

Thank you