NexGen Wood Protection LTD.

This is a NexGen House... Is yours?

CLT’s ✓
Glulam ✓
Panels ✓
Dimensional ✓
Flooring ✓
Cladding ✓
Decking ✓
Fascia ✓

Making Wood Perfect.
What is NexGen?
An Introduction To NexGen Products

- NexGen is the trade name for a revolutionary & necessary wood coating system developed by leading chemists in the United States & Canada

- NexGen Wood Protection, the global leader in the development and distribution of eco-friendly protective wood coatings since 2003, presents...
NexGen: Making Wood Perfect

- NexGen is an Environmentally Friendly & Non-Toxic wood coating system
- Protects wood from mould, rot, mildew and fungus
- Protects wood from wood-boring insects, including all termites and carpenter ants
NexGen, NexGen FlameShield, & NexGen ADVANCED
NexGen: Making Wood Perfect

- Works on all species of wood and all wood products
- NexGen comes Perfectly Clear or can be tinted to any colour (blue is the most popular!)
NexGen, NexGen FlameShield, & NexGen ADVANCED

NexGen: Making Wood Perfect

- And after an incredible amount of R&D and audited testing, NexGen offers products with a certified Class A Fire Rating

That’s the same fire rating as concrete!
In fact, our fire protection is so remarkable that our NexGen products are the first wood coating products in history to obtain a global, third party insurance policy for fire.
So, no fire, no mould or rot, no insects... no chance it is inexpensive, right? Not so!

Proprietary Technology (MicroBarrier bonding agent) combined with simple, single application method means material and production costs are very low

The cost? Significantly less than any alternative for fire OR mould OR rot OR insects – and NexGen protects wood fibre from ALL OF THEM!
NexGen, NexGen FlameShield, & NexGen ADVANCED

NexGen: Making Wood Perfect

NexGen is available in three products:

NexGen, which is warranted to prevent mould, insects, and rot, and also has a Class B fire rating;
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NexGen is available in three products:

NexGen FlameShield, our stand-alone fire inhibitor which has a Class A fire rating and is backed by our unique global third party warranty for fire;
NexGen, NexGen FlameShield, & NexGen ADVANCED

NexGen: Making Wood Perfect

NexGen is available in three products:

NexGen ADVANCED, our total protection coating, warranted from fire, mould, rot, and insect infestation!
How exactly is NexGen able to do what it does?
NexGen, NexGen FlameShield, & NexGen ADVANCED
NexGen: Making Wood Perfect

- Proprietary MicroBarrier Protection – the “Secret Sauce”
- Creates a semi-permeable water barrier – NexGen’s Dry Additives, which are rapidly absorbed into the wood substrate, can not leach out
- Single application process (spray, flood coat, dip, brush, roll, or pressure treat) that covers all six sides of the wood / engineered wood product – one coat is all you need.
Flood / Spray Coating – Just One Application Option

Wood enters the coating machine, with brushes first removing any dirt or debris. Nozzles from each direction ensure all six sides of the wood get sufficient coating. Excess coating material is caught in a recycling system to ensure maximum coating efficiency. Additional drying equipment is not required for NexGen coatings; air-drying is more than sufficient.

At this point, the coated material is almost dry to the touch and ready for hard-packing (no stickers).

COATING COMPLETED!
After the application process, NexGen products are wet-stacked and hard-packed.

No kiln drying necessary, no stickers needed between rows in bundle.

Kept under cover for 1 - 3 hours for curing.

 Stored outside – no plastic covers needed.

Process is simple, keeping costs low.
Topical single-application coating applied to all six sides of wood.

MicroBarrier Protection – the “Secret Sauce”.

MicroBarrier creates a semi-permeable water barrier; moisture can leave but NG Dry Additives cannot leach out.

NGDA like water so they continually migrate deeper into the wood so over time NexGen will provide even greater protection.

MicroBarrier in NexGen bonds with wood fibre at the cellular level trapping NGDA so they can’t escape.

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NexGen, NexGen FlameShield, & NexGen ADVANCED

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- The MicroBarrier also protects wood from uncontrolled moisture absorption or loss
- Now post-construction shrinkage of wood after is no longer an issue
- Also minimizes the damage that untreated exposed lumber sustains (warping, cupping, etc.) – up to 25% more usable wood per bundle!
- End product is a healthier, stronger, well-conditioned piece of wood
Wood can be painted or stained after NexGen products are applied - no effect on protection or warranty

NexGen products can be custom tinted to meet the customer’s need

Factory application allows for Quality Control and consistent application
NexGen, NexGen FlameShield, & NexGen ADVANCED

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- Works on any wood product (stick, plywood, OSB, particle board, I-Beams/I-Joists, EWP, etc.) as long as there is a wood fiber component
- No issues with species, from SYP to Eucalyptus
- Non-corrosive to plates and fasteners
NexGen, NexGen FlameShield, & NexGen ADVANCED

NexGen: Making Wood Perfect

- NexGen products do not off-gas, leach, or in any way contaminate a job site
- Do not add VOC’s to wood
- Same toxicity as a water-based paint
- Waste material discarded with regular waste, no special handling required
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NexGen: Making Wood Perfect

“It sounds too good to be true”
NexGen, NexGen FlameShield, & NexGen ADVANCED
NexGen: Making Wood Perfect

Don’t just take our word for it

- BM TRADA
- Louisiana State University Forestry Department
- Alberta Innovates Tech Futures (formerly Alberta Research Council)
- Intertek Laboratories
- Realtime Laboratories
- Galbraith Laboratories
- SGS Testing Company
- Bodycote (Bombardier), and more
## Sample Testing Data – Fire Resistance

<table>
<thead>
<tr>
<th>Compliance:</th>
<th>Agency:</th>
<th>Date:</th>
<th>Substrate:</th>
<th>Results:</th>
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<tbody>
<tr>
<td>ASTM E84</td>
<td>Intertek</td>
<td>12 Feb 08</td>
<td>Doug Fir 2x4</td>
<td>FS &lt; 25 (Class A) SD = 15</td>
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<td>Hem/Fir 1x6</td>
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<td>24 June 08</td>
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<table>
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<th>Results:</th>
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<td>¾&quot; OSB</td>
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<td>&gt; 95 Minutes *</td>
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<td>½&quot; OSB</td>
<td>&gt; 95 Minutes *</td>
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<td>Weathered ¾&quot; Plywood w/ ExBlock</td>
<td>FS &lt;10 (Class A)</td>
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*NexGen, NexGen FlameShield, & NexGen ADVANCED*
Mortality and weight loss tests demonstrate NexGen’s resistance to Formosan subterranean termites. 100% mortality = 0% survival.

NexGen shows the best resistance compared to untreated lumber and the control (southern yellow pine sapwood).

Re: Louisiana Forest Products Development Center, LSU, Baton Rouge, LA (2005)
Formosan subterranean termite attack is strongly resisted on NexGen treated sill plates while untreated sill plates show no resistance.

Re: Louisiana Forest Products Development Center, LSU, Baton Rouge, LA (2005)
Inoculated with fungi and exposed over a 5 week incubation period, NexGen treated samples show no fungus growth (10 = No Mould Growth, 1 = Total Mould Growth).

Viability analysis of samples produced Trichoderma, a common species of mould. Samples had visible mould growth prior to NexGen treatment.

NexGen provides 10-fold protection against mould versus untreated lumber.
Weight loss due to fungal degradation of wood-based composites is an important concern for the structural integrity of the material used in the field. NexGen provides 20 to 50 times more protection against decay versus untreated lumber.

Re: Louisiana Forest Products Development Center, LSU, Baton Rouge, LA (2006)
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Notable NexGen Projects

An Introduction To NexGen's Growing Global Presence
Sustainable housing development planned and coordinated by Actor Brad Pitt as a model for the rebuilding of New Orleans after Hurricane Katrina.

Europe’s Tallest Wood-Clad building, Middlesbrough, UK. All the exterior wood was protected with NexGen, 2008 and looks as beautiful today as it did after its completion.
New American Hospital, Dubai. All the wood used in the interior design of the building was required to have a strong fire retardant coating, for obvious reasons.

Eco-friendly Housing Development, Hainan, China. Hainan is known for the voracious termites that inhabit the island as much as the beautiful island itself. NexGen was chosen to protect the wood from these destructive insects.
Greater Newark Conservancy. Being an eco-friendly development, the GNC searched for an eco-friendly fire retardant exterior coating. NexGen was their choice.

Panama Canal Expansion Project, completed. One of the largest construction projects in history, NexGen was used in multiple ways to protect the massive amounts of wood used in this project.
Penticton Lakeside Resort. CLT’s (Cross-Laminated Timbers) are the fastest growing form of construction in the world. NexGen is the perfect treatment to keep the beauty of the wood but add the protection and peace-of-mind the clients need.

Bavarian Manor, Heyuan, China, ongoing. Bavarian Manor is the largest wood-construction project in China in a half century. Fear of fire and insect damage almost killed the wood industry here – but NexGen is helping to change that!

Penticton Lakeside Resort. CLT’s (Cross-Laminated Timbers) are the fastest growing form of construction in the world. NexGen is the perfect treatment to keep the beauty of the wood but add the protection and peace-of-mind the clients need.
NexGen, NexGen FlameShield, & NexGen ADVANCED

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Notable NexGen Projects

French Language School, Beijing, China. This school was not going to be allowed to open due to fire concerns unless NexGen – and only NexGen – was used to protect all the beautiful Western Red Cedar beams you see here!

Gov’t Building, Hainan, China. In one of the most termite ridden, humid, and generally difficult building environments in the world, NexGen was chosen to protect half a million cedar shingles plus all the glulam beams used in this amazing project.
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Notable NexGen Projects


NexGen is honoured to be chosen to provide protective coatings for one of the world’s most iconic buildings. The refurbishing of this beautiful landmark will be an ongoing project for the next few years!
Why Use NexGen Products?
NexGen: Making Wood Perfect

For Manufacturers, Builders & Consumers

- Environmentally Friendly & Non-Toxic
- Protects homes from Fire, Mould & Insects
- Extensive third-party testing
- Easy and cost-effective to produce & purchase
Why Use NexGen Products?

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NexGen Products Can Be Used For:

- Entire superstructure of homes
- Siding, shakes and shingles
- Fencing, fascia and other outdoor materials
- Window & door stock,
- Moulding, wood flooring
- Furniture (indoor & outdoor)

Above is a picture of a large development using NexGen in Hainan, China, an area known for voracious termites and strict building codes for wood use due to fire concerns.
Why Use NexGen Products?

NexGen: Making Wood Perfect

- Won’t affect warranties by Mitek, Alpine, Trus-Joist, Boise, I-Joist, G-P, code officials and others
- Product has received government approval in the US, Canada, Europe, China, and Australia & New Zealand, and is being shipped to additional parts of Asia, Africa and Central & South America
- Can be tinted to be a “finished product”
# Why Use NexGen Products?

**NexGen: Making Wood Perfect**

## For Manufacturers, Builders & Consumers

<table>
<thead>
<tr>
<th>Feature</th>
<th>NexGen</th>
<th>Smart Guard</th>
<th>Frame Guard</th>
<th>Pink Wood</th>
<th>Standard PT</th>
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Why Use NexGen Products?

NexGen: Making Wood Perfect

- Our MicroBarrier technology was developed by an American coatings' specialist with over 30 years experience
- Eleven years in the marketplace and ongoing R&D and testing to keep our products leading the industry, never chasing it
- Years of saved expense: Independent testing, approval in highly regulated markets (Canada, US, EU, Australia), market acceptance and in situ experience
NexGen Wood Protection is a Canadian Company.

- Began production of the NexGen line of products in 2012.
- Family company whose owners have more than 60 years of experience in Lumber, Treating and Chemical industries.
Available Exclusively From
NexGen Wood Protection LTD.
Please visit
www.nexgenwoodprotection.com
for videos, test results, and
much more information.