

LP® SMARTSIDE® ADVANTAGES

With 20 years of successful performance, it's easy to see why the LP® SmartSide® brand is one of the fastest-growing brands for siding materials in the U.S. LP has redefined traditional building materials with treated engineered wood products that are designed to offer game-changing durability, beauty and workability.

LP Has Workability Nailed

Our treated engineered wood siding cuts out the time you spend dealing with warped and split pieces when properly stored and applied. Virtually every piece leaves the mill straight and ready to use.



- Works and cuts like traditional wood
- Easier to install than fiber cement
- Requires fewer tools
- Weighs less, easier to carry, less breakage than fiber cement
- 16' lengths vs. fiber cement's shorter 12' lengths, often resulting in fewer seams or joints on your structure

Beauty Designed for Peace of Mind

Choose your style to get the look you want with the beauty of treated engineered wood trim and siding. Our products offer you the versatility to achieve stunning results.



- Pre-primed for optimal paint adhesion
- No efflorescence
- Realistic woodgrain texture
- Longer lengths may mean fewer seams for better aesthetics
- Created with the renewable resource of wood, procured using processes certified by the Sustainable Forestry Initiative (SFI®)
- The LP SmartSide Siding 5/50 year limited warranty is longer and covers more than most fiber cement product warranties
- LP SmartSide limited warranty also includes damage from hail - see warranty for details

Our Durability Difference

Our products have the advanced performance of treated engineered wood for durability. Our SmartGuard® process adds strength and helps withstand impacts.



- The LP SmartSide limited warranty is longer than most fiber cement product warranties
- LP SmartSide Lap Siding products are more resistant to impact damage from common projectiles like golf balls and baseballs than fiber cement products
- Resists damage of freeze-thaw cycles
- Even with moisture and humidity SmartSide resists fungal decay

www.LPSmartSide.com

Cal. Prop 65 Warning: Use of this product may result in exposure to wood dust, known to the State of California to cause cancer.



CARE AND MAINTENANCE INSTRUCTIONS

LP SmartSide products are engineered to look beautiful with easy maintenance. A few simple care tips can preserve the attractive appearance of your home for many years to come.

PREVENTATIVE MAINTENANCE

- Check for small construction dents and gouges. Fill these indentations with a sealant that meets ASTM C920 minimum Class 25 requirements, then prime before painting.
- Make sure sprinklers do not spray water directly onto the trim or siding.
- Keep roof surfaces and gutters in working order so water is diverted away from the siding.
- Keep the painted surface free of mold, mildew and algae.
- Make sure your trim and siding are a minimum of six inches above the ground. Do not allow garden mulch or other debris to build up and compromise your clearance.
- Maintain a 1/2 inch per foot slope away from the house for all adjoining surfaces including patios, driveways, grade, etc. so that water will drain away effectively.
- Replace missing or damaged caulking around the joints and seams where different surfaces meet with a sealant that meets ASTM C920 minimum Class 25 requirements.
- Repaint your trim and siding before the existing paint fails. Your local weather conditions will affect the longevity of your paint's performance.

INSPECTING YOUR TRIM AND SIDING

Inspection is an essential part of maintenance. Perform the following checks once a year.

- Inspect paint for cracking, peeling, fading or chalking. Pay special attention to the bottom row and under the window casing and repaint if necessary.
- Check all joints and seams for cracking or missing sealant and remove and replace where necessary.
- Look for signs of mildew and remove if necessary.
- Inspect flashing and gutters for damage or blockage. Repair any damage found, and remove any blockages so that water can drain away freely.

REPAINTING YOUR EXTERIOR

When painting or repainting, choose an exterior-quality 100% acrylic latex paint specially formulated for use on wood and engineered wood substrates. Semi-gloss or satin finish oil or alkyd paints are also acceptable. For flat alkyd paint, please check with the coating manufacturer for their recommendations for use on composite wood siding. Make sure the paint comes with a minimum fifteen-year warranty.

First, remove all dust and mildew from the surface by washing trim and siding with a brush and a solution of mild detergent (such as dish soap) and water. Start at the top, work your way down, and rinse from top to bottom with water. **Do not use a pressure washer.** Once surfaces are clean and dry, paint may be applied using a sprayer or brush. Pay special attention that the bottoms edges are covered with paint. LP recommends applying two coats of unthinned paint at the manufacturer's required spread rate.

SIMPLY A BETTER WARRANTY

The LP SmartSide 5/50 Year Limited Warranty offers you a 5-year, 100% labor and material replacement feature and a 50-year prorated limited warranty. You can rest assured knowing these products* are warranted not to buckle, delaminate or rot. Plus have the added comfort of knowing all LP SmartSide products are warranted to resist termites fungal decay when properly applied, finished, and maintained.

**LP SmartSide 16' long 76 Series Fiber Substrate Lap Siding is not warranted for use in certain geographic areas. See the complete warranty at www.lpcorp.com*

THE DURABILITY DIFFERENCE





A DIFFERENCE YOU CAN SEE

With less durable siding, unsightly damage can happen merely from everyday bumps and exposure to the elements.

LP® SmartSide® products combine the rich cedar-grain texture of traditional wood siding with the advanced performance of treated engineered wood – to help extend its curb appeal for years to come.

Read on for powerful evidence of LP SmartSide products' toughness.

THE SECRET TO ADVANCED DURABILITY

All LP® SmartSide® products are treated to the core through our proprietary SmartGuard® process. With four components of protection, the SmartGuard process adds strength and helps LP SmartSide products withstand impacts, damage of freeze-thaw cycles, high humidity, fungal decay and more. See more about how LP SmartSide is made at [youtube.com/lpsmartside](https://www.youtube.com/lpsmartside).



BIG-TIME BREAK RESISTANCE

Testing shows that LP® SmartSide® strand products offer outstanding impact resistance – better than vinyl and fiber cement siding – which means they can stand up better against everything from everyday bumps to airborne storm debris.

A STRONG DEFENSE AGAINST HAIL

Third-party test results demonstrate that LP SmartSide lap siding resisted hail damage better than fiber cement and vinyl. In fact, the LP SmartSide warranty covers impacts from hail up to 1.75" in diameter.



LESS BREAKAGE FOR EASIER INSTALLATION

Because LP SmartSide is less fragile than fiber cement, it's less prone to accidental breakage during handling and installation. It's also lighter than fiber cement siding and can be carried by just one person without breaking under its own weight. All this helps make LP SmartSide siding faster and easier to handle and install, and results in less waste.

NASA IMPACT DAMAGE RESISTANCE EVALUATION

To help prove the superior durability of LP SmartSide strand siding, LP Building Products asked the National Aeronautics and Space Administration (NASA) to evaluate the impact damage resistance of both engineered wood strand siding from the LP SmartSide brand and fiber cement siding. **Here's a summary of some key findings.**



LP SmartSide

Fiber Cement



LP SmartSide

Fiber Cement



LP SmartSide

Fiber Cement

When Hit by Small Rocks

Small rocks shot at LP SmartSide strand siding at 107 miles per hour have barely left a mark. The same kinds of rocks can visibly damage fiber cement even at lower speeds.

When Hit by Golf Balls

A golf ball traveling at 63 miles per hour left no visible damage to LP SmartSide strand siding. Golf balls moving at less than 50 miles per hour can visibly damage fiber cement.

When Hit by Baseballs

LP SmartSide strand siding has been hit by a baseball at 77 miles per hour and shown no visible damage. Slower-moving baseballs have put holes in fiber cement.

Video of the NASA evaluation can be found at lpsmartside.com/advantages/durability.

NO FEAR OF NATURE

STAYS PUT IN HIGH WINDS

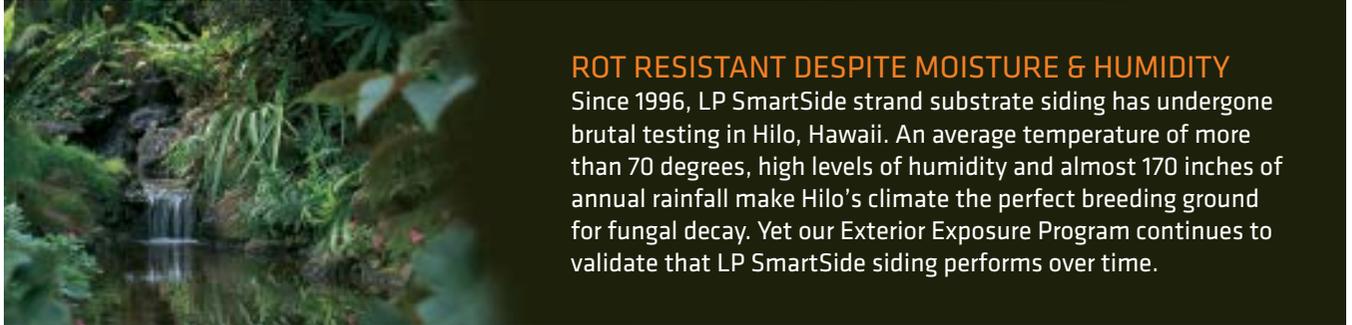
LP® SmartSide® Lap Siding is designed to withstand tough storms with wind gusts of up to 200 miles per hour.

Refer to ESR-1301, Table 2B, Lap Siding.



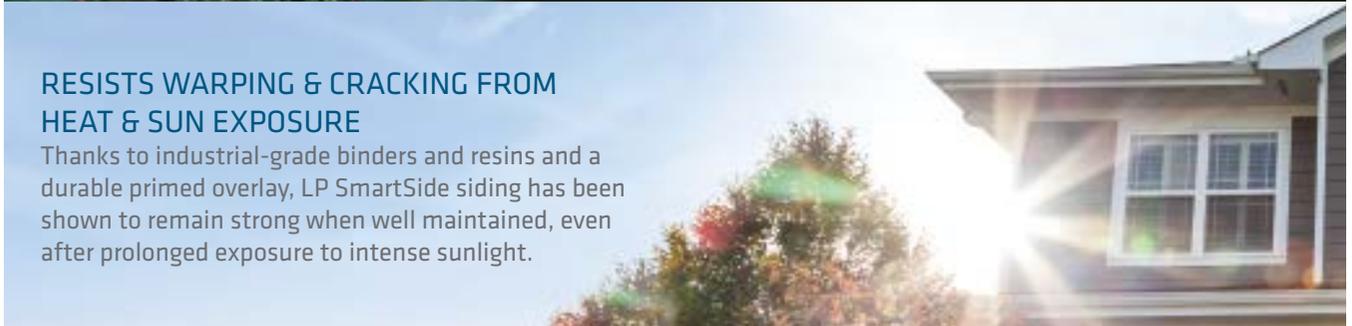
ROT RESISTANT DESPITE MOISTURE & HUMIDITY

Since 1996, LP SmartSide strand substrate siding has undergone brutal testing in Hilo, Hawaii. An average temperature of more than 70 degrees, high levels of humidity and almost 170 inches of annual rainfall make Hilo's climate the perfect breeding ground for fungal decay. Yet our Exterior Exposure Program continues to validate that LP SmartSide siding performs over time.



RESISTS WARPING & CRACKING FROM HEAT & SUN EXPOSURE

Thanks to industrial-grade binders and resins and a durable primed overlay, LP SmartSide siding has been shown to remain strong when well maintained, even after prolonged exposure to intense sunlight.



RESISTS DAMAGE THROUGH FREEZE-THAW CYCLES

Many substrates delaminate when water is absorbed, then freezes and expands. LP SmartSide products, made with the SmartGuard® process, resist water and therefore are less subject to freeze-thaw cycle damage.

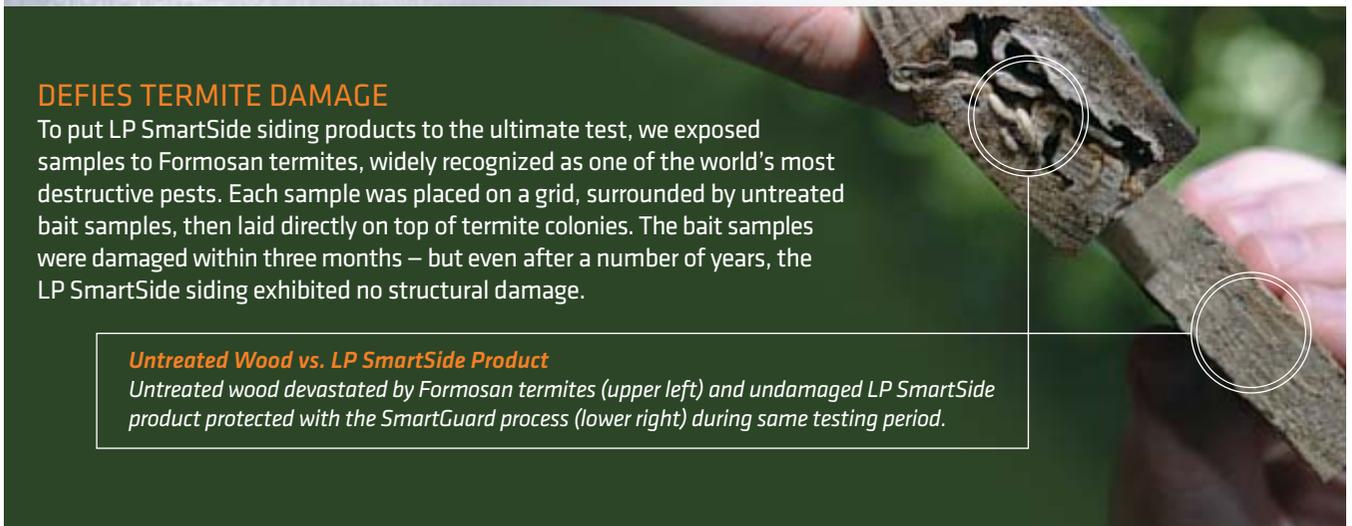


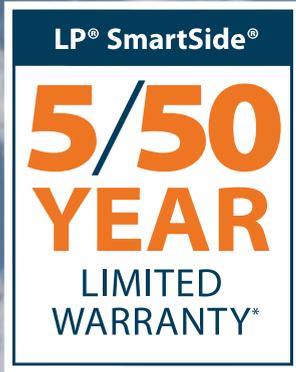
DEFIES TERMITE DAMAGE

To put LP SmartSide siding products to the ultimate test, we exposed samples to Formosan termites, widely recognized as one of the world's most destructive pests. Each sample was placed on a grid, surrounded by untreated bait samples, then laid directly on top of termite colonies. The bait samples were damaged within three months – but even after a number of years, the LP SmartSide siding exhibited no structural damage.

Untreated Wood vs. LP SmartSide Product

Untreated wood devastated by Formosan termites (upper left) and undamaged LP SmartSide product protected with the SmartGuard process (lower right) during same testing period.





A STRONG WARRANTY FOR TOTAL PEACE OF MIND

LP has your back with an industry-leading, transferable, limited warranty.

- 5-year 100% labor and material replacement
- 50-year prorated limited warranty on substrate

*For complete warranty details visit lpcorp.com



Start using LP SmartSide products now.

Call **(888) 820-0325** or go to lpsmartside.com/advantages/durability.



lpsmartside.com

Cal. Prop 65 Warning: Use of this product may result in exposure to wood dust, known to the State of California to cause cancer.

©2017 Louisiana-Pacific Corporation. All rights reserved. LP, SmartSide, and SmartGuard are registered trademarks of Louisiana-Pacific Corporation.

Specifications subject to change without notice.

LPZB0763 5/17

Frequently Asked Questions – LP® SmartSide® Siding, Trim, and Soffit

1. Can soffit be used for siding?
 - a. No. The soffit is designed specifically for a protected soffit application whereas siding is designed for a direct exposure to the weather. Refer to the installation instructions.
2. Is the LP SmartSide architectural series cedar shake siding primed?
 - a. Yes. It is primed on the face and edges.
3. Can I install SmartSide over foam sheathing?
 - a. Yes. The fastener length must provide 1.5-inches of penetration into the wood stud or combined wood sheathing and stud. Avoid compression of the foam sheathing. Refer to the foam sheathing manufacturer's installation instructions, the LP SmartSide installation instructions, and the LP SmartSide code reports. LP SmartSide precision series panel siding provides wall bracing when installed over wall assembly with maximum 1-inch thick foam sheathing on unconditioned side and ½-inch gypsum on the conditioned side
4. Can I use a traditional transparent or semi-transparent stain on SmartSide products?
 - a. No. These stains are typically low in solids and provide less protection from UV and other weathering effects. There are new acrylic latex paints commercially available that can replicate the appearance of a semi-transparent stain. Refer to the installation instructions for proper finishing.
5. Can I use a solid stain on SmartSide products?
 - a. Yes. These stains are generally lower in solids so increased maintenance will probably be required. Refer to the installation instructions for proper finishing.
6. Can I leave Knotty Barnside project panel natural or unpainted?
 - a. No. It must be primed and painted. Refer to the installation instructions for proper finishing.
7. Can I use a transparent or semi-transparent stain on Knotty Barnside?
 - a. No. These stains are typically low in solids and provide less protection from UV and other weathering affects. There are new acrylic latex paints commercially available that can replicate the appearance of a semi-transparent stain. Refer to the installation instructions for proper finishing.
8. Can I install SmartSide trim over lap siding, rather than butting to it?
 - a. Yes. Special precautions should be taken to provide proper spacing between the lap siding and the trim, as well as fastening of the trim.
9. Can SmartSide panel be installed horizontally or diagonally?
 - a. No. LP SmartSide panel siding is designed specifically to be installed parallel to the framing. Refer to the LP SmartSide® Precision series panel siding installation instructions.

10. What kind of nails do I need?
 - a. Corrosion resistant fasteners must be used to avoid rust staining and erosion of the fasteners. Please refer to the proper installation instructions and code report for the minimum size and type, as well as the fastening schedule.
11. If the installation is not consistent with the application instructions, will it void my warranty?
 - a. The LP® SmartSide® limited warranty will remain in effect with the exception that any issue caused by an installation that varies from the LP SmartSide installation instructions will not be the responsibility of LP. Refer to the installation instructions for proper installation.
12. Can I install SmartSide® lap vertically and cover the joint with battens?
 - a. No. LP SmartSide siding is designed for horizontal installation only. Ungrooved LP SmartSide Precision series panel siding is available for board and batten applications. Refer to the installation instructions for proper installation.
13. What is the fire rating?
 - a. LP SmartSide is a class C (III) rated product when tested according to ASTM E84. All LP SmartSide siding can be used in a 1-hour fire rated assembly when it is installed over 5/8 type-X gypsum, which is consistent with other siding types such as fiber cement siding.
14. What kind of paint must I use?
 - a. Acrylic latex coatings designed for wood composites are highly recommended. Refer to the installation instructions for proper installation.
15. How do I install SmartSide siding® over SIP or ICF assemblies?
 - a. Follow the LP SmartSide installation instructions. The SIP manufacturer will need to specify the type of corrosion resistant fastener and the fastener spacing to meet the minimum required wind-load values. The fastener spacing must not exceed the maximum fastener spacing stated in the LP SmartSide installation instructions. If you have further questions, contact the LP Technical staff at (800) 450-6106. Consult your local code authority to ensure compliance with the local building code.
16. Is it beneficial to prime the back side of the LP SmartSide® siding or trim?
 - a. No. Back priming has proven to be useful to control tannin staining with some types of solid wood siding, trim, and some composite sidings. LP SmartSide products are designed to perform without back priming.
17. Should we caulk at the overlap of the lap siding?
 - a. No. Refer to the installation instructions for proper installation.
18. Can we rip lap to create a smaller size?
 - a. It may be necessary to rip the lap siding at times where the wall terminates at the soffit or around penetrations. Use special care to prime and paint any exposed wood that may result. Ripping the lap siding to make narrower lap siding is not recommended.

19. Can LP® SmartSide® trim and fascia be miter cut?
- Do not miter cut the edges or ends of the trim at corners. Miter cuts or “picture framing” around door and window openings are acceptable. Butt joints are preferred but scarfed joints are permitted with LP SmartSide trim and fascia. All joints must be spaced 3/16 inch to accommodate expansion during equilibration. Refer to the installation instructions for proper installation.
20. Can I overlap my LP SmartSide siding more than the recommended 1”?
- Yes but the siding should not project beyond the thickness of the trim. The specified overlap and edge-spacing of the nails in the installation instructions are minimum requirements. Refer to the installation instructions for proper installation.
21. Are there any special considerations when applying any panel siding to the interior of my home and is this application allowed and will my warranty be good?
- Using LP SmartSide in an interior application is acceptable. Please review the material safety data sheet (MSDS) before using the product indoors.
22. When panels are installed, is it ok to allow the panel to rest on the flashing?
- No. A drainage space is required between the panel drip edge and the flashing. Refer to the installation instructions for proper installation.
23. Now that your fiber products have Zinc Borate, can they be used west of the Cascades?
- LP SmartSide Architectural and Precision Series Siding can be used west of the Cascades. Certain LP SmartSide Foundations Series siding cannot. See the Smart Side warranty for complete details.
24. Are LP SmartSide products “green”?
- The green attributes built into LP products today are recognized in green building certification programs around the country, most often in the “Materials & Resource Efficiency” section.
 - LP uses 100% SFI-certified wood – a renewable resource from small diameter, rapidly regenerating trees
 - LP SmartSide products are treated with environmentally friendly borates to resist rot, termites, and mold
 - LP SmartSide is durable and comes with a 50-year limited warranty
25. Can LP SmartSide® siding be used in a one-hour fire-rated wall assembly?
- Yes. It must be installed over 5/8-inch type-x gypsum the same as fiber cement siding.
26. Are LP SmartSide® products compliant with the building code?
- Yes. LP SmartSide Precision series Lap and Panel siding is covered by the ESR-1301 code report. LP SmartSide Foundation series lap and panel siding, and architectural shake and panel meet the requirements of ANSI 135.6 and therefore satisfy the requirements of the 2006 International Building Code. Code report NER-626 also represents the Foundation and some of the Architectural series siding products. The code reports are available at:

- i. http://www.icc-es.org/reports/pdf_files/NES/NER626.pdf
 - ii. http://www.icc-es.org/reports/pdf_files/ICC-ES/ESR-1301.pdf
- 27. Can LP® SmartSide® siding be fastened directly to the studs?
 - a. Certain LP SmartSide products can be attached to framed walls without sheathing such as Precision series siding. Refer to the LP SmartSide installation instructions for the specific type of LP SmartSide siding you are using. Note that a code-approved breathable water-resistive barrier is required between the siding and the studs.
- 28. Why are the LP SmartSide code reports important?
 - a. The code reports are published by the International Code Council and demonstrate the safe use of the siding. The code reports are useful to engineers, architects, and code officials to ensure the siding is used within its design limits.
- 29. Is a house-wrap required behind the LP SmartSide siding?
 - a. A code-approved, breathable, water-resistive barrier is required behind all LP SmartSide® siding as per the International Building Code. Refer to the installation instructions for proper installation.
- 30. Can I install LP SmartSide® siding differently than what is specified in the LP SmartSide installation instructions?
 - a. LP strongly recommends LP SmartSide siding be installed according to the installation instructions. If the siding is installed in a manner inconsistent with the instructions, the siding will continue to be warranted under the LP SmartSide limited warranty although any issue caused by the inconsistent installation will not be the responsibility of LP. Refer to the installation instructions for proper installation.
- 31. Is LP SmartSide® siding permitted for use in California's high fire hazard areas specified in chapter 7 of the California building code?
 - a. Yes. All LP SmartSide Foundation and Precision series siding is listed by the California State Fire Marshals office as accepted siding. Special installation methods are required in high fire hazard zones. Refer to the report at http://www.lpcorp.com/Literature/LP_SmartSide_SFM_Report.pdf for installation details.
- 32. Why is it important to space LP SmartSide® siding at all joints?
 - a. LP SmartSide siding will expand naturally as its moisture level balances with the surrounding environment. Spacing the joints provides the necessary room for the siding to expand. This is also an important reason to properly apply a non-hardening caulk or sealant. Refer to the installation instructions for proper installation.
- 33. Do LP SmartSide products resist wind loads?
 - a. Yes. Refer to the LP SmartSide code reports ESR-1301 and NER-626.
- 34. Is LP SmartSide panel siding structurally rated?
 - a. Some LP SmartSide siding is structurally rated. Refer to the LP SmartSide code reports ESR-1301 and NER-626.

35. Can the butt joints on LP SmartSide lap siding be pan-flashed rather than caulked/sealed?
- The butt joints of LP SmartSide Precision Series lap siding can be pan-flashed without caulk, sealant, or joint cover if the siding is prefinished and the ends of the siding are factory primed and prefinished. All field cut ends must be caulked/sealed regardless of field priming or painting. Refer to the installation instructions for proper installation.
36. Is LP SmartSide siding hail resistant?
- LP SmartSide Precision Series siding has been tested and qualified by an independent lab according to the acceptance criteria in AC321. A hard-body impact test is part of that acceptance criteria to represent hailstones, hammer blows, baseballs, or other impacts.
37. How do I talk to an LP representative about installation questions?
- Call our Warranty and Technical Services staff at 800.450.6106. There is a staff member available Monday – Friday during regular business hours.
38. Does LP SmartSide siding have an R value?
- No. Lap siding inherently provides air leakage at the overlap and panel siding is typically grooved so the value is reduced. According to APA-The Engineered Wood Association, OSB and plywood sheathing have a thermal resistance value of less than 0.55 at thicknesses less than 7/16”
39. Does LP SmartSide provide resistance to sound transmission through an exterior wall?
- Yes. It will differ between lap and panel siding and thickness is a factor. APA-The Engineered Wood Association and the National Association of Home Builders provide techniques that can be used to decrease the sound transmission through the wall assembly.
40. Are there places where I can't use LP SmartSide products?
- Certain Foundation Series siding is not warranted for use in Alaska, Hawaii, Northern California, or west of the Cascades in Washington, Oregon, and California. LP has no other geographic limitations on the use of SmartSide products. Always check your local building code for any special restrictions.
41. How do I know what fastener to use?
- The installation instructions include the fastening specifications. For further detail in seismic or high-wind load areas, refer to ESR-1301 or NER-626 for additional fastening details.
42. How much paint do I need to apply and how often do I need to repaint the siding?
- Refer to the “Finishing Instructions” section of the LP SmartSide® installation instructions and your paint manufacturer’s installation instructions. Proper maintenance is important to the lasting performance of any exterior siding material.
43. How do I know LP® SmartSide® siding is permitted for use in my area?
- Check with your local code authority. LP SmartSide is widely recognized and accepted. Refer your local official to code report ESR-1301 for

Precision Series products and to NER-626 for Foundation Series and some Architectural Series LP SmartSide siding.

44. Can I use LP SmartSide® siding in Canada?
 - a. Yes, refer to CCMC listings 11826 and 12353
45. Will freezing conditions affect the performance of LP SmartSide® siding?
 - a. LP SmartSide products are resistant to freeze thaw damage.
46. Can LP SmartSide® siding be used in humid climates?
 - a. Yes, it is designed and tested to withstand wet humid conditions. Some restrictions do apply to certain Foundation Series siding products. Refer to the LP SmartSide limited warranty for additional details..
47. How is the LP SmartSide® Precision Series siding different from OSB?
 - a. Commodity OSB sheathing and LP SmartSide Precision Series siding both use geometrically controlled wood strands to provide superior strength and stiffness. LP SmartSide Precision Series siding is treated with the SmartGuard® process, bonded together with increased levels of a durable exterior binder system, overlaid with a resin-impregnated prime-base overlay, and edge coated with a proprietary water-resistive primer coat.
48. How is LP SmartSide Foundation Series siding different from hardboard?
 - a. LP SmartSide Foundation Series siding is the only fiber based siding product in the world treated to resist decay fungi and termites with the SmartGuard process
49. How long is the LP SmartSide® warranty?
 - a. The LP SmartSide limited warranty is a 50-year warranty with a 5-year repair or replace feature. Refer to the LP SmartSide warranty for details.
50. Can LP SmartSide® siding and trim be installed so it contacts the ground?
 - a. No. LP SmartSide siding is designed to be used in above-ground applications.
51. Why do I have to space the joints of the LP SmartSide® siding and trim?
 - a. LP SmartSide products expand as their moisture content balances with jobsite conditions after it is installed. It is important to properly space the joints 3/16-inch so there available room for the siding to expand.
52. Can I rip the LP SmartSide trim?
 - a. Ripping the trim, and fascia is not recommended, as it will leave the edges unprotected. If the material is ripped, special care must be taken to prime, paint, and seal all exposed wood fiber as described in the finishing section of the respective installation instructions.
53. Can LP SmartSide trim be used as fascia without a subfascia?
 - a. Yes, certain LP SmartSide Fascia can be installed without a subfascia but it cannot be used structurally. Refer to the installation instructions for proper installation.
54. Can I use a finishing or casing nail on LP SmartSide® trim?
 - a. No. A corrosion resistant box or common style must be used. Refer to the installation instructions for proper installation.
55. How long should I wait before I paint my LP SmartSide® Trim and Siding?

- a. LP® SmartSide® products should be painted as soon as possible after installation. They must be painted within 180-days of installation. Refer to the installation instructions for proper finishing of the siding and trim.
56. Can LP SmartSide® siding be blind nailed?
- a. LP SmartSide Precision Series lap siding can be blind nailed. Refer to the installation instructions for proper installation.
57. Do all of the nail heads need to be caulked?
- a. Nail heads that are recessed or counter sunk must be caulked. Refer to the installation instructions for proper installation.
58. Does LP SmartSide vented soffit provide enough ventilation to satisfy the building code?
- a. Yes. LP SmartSide vented soffit provides ten square inches of ventilation for every twelve inches of length of soffit.
59. Do I have to apply a screen to the vents of the LP SmartSide vented soffit?
- a. A screen is not required to be applied to the back of the LP SmartSide vented soffit. The opening of the vent complies with the 2006 International Building Code.
60. Which LP SmartSide soffit products are rated to be used as roof sheathing?
- a. LP SmartSide Precision 76 Series soffit is the only soffit approved to be used as a structural roof sheathing.
61. What are the allowable maximum spans for LP SmartSide siding?
- a. Most LP SmartSide siding is limited to 16-inch framing spans. 76 Series Precision lap siding and 190 Series Precision panel siding may be used with up to 24_-inch framing spans.
62. Do I need special tools to work with LP SmartSide siding?
- a. No. LP SmartSide siding can be installed using common woodworking tools.
63. Can LP SmartSide Architectural Series cedar shake siding be installed with the straight edge down?
- a. Yes. It can be installed with either edge down. If the random edge is down, start at the lower left corner of the wall. If the straight edge is down, start at the lower right corner of the wall. Refer to the installation instructions for proper installation.
64. Can LP SmartSide Architectural Series cedar shake siding be blind-nailed?
- a. No. Refer to the installation instructions for fastening.
65. Is it okay to exceed the minimum overlap on LP SmartSide Foundation and Precision Series lap siding?
- a. Yes, but do not let the overlapped thickness of the siding exceed the thickness of the trim. Do not overlap the siding less than the minimum specified amount. Refer to the installation instructions for proper installation.
66. Can stucco be applied directly against LP SmartSide trim?

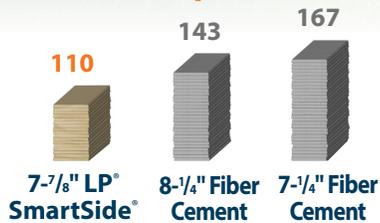
- a. No. The trim must be separated from the stucco and other masonry materials with an impervious flashing or air space. Refer to the installation instructions for proper installation.

LP SmartSide®

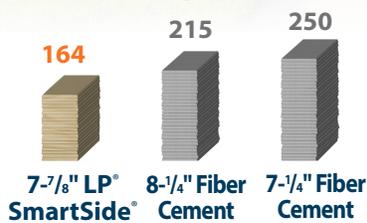
Less is More

With SmartSide's 16' lengths, here's how many pieces you need to cover:*

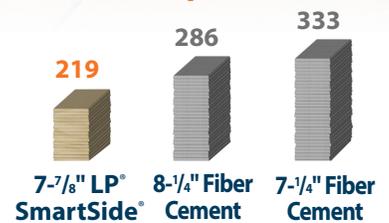
10 Squares



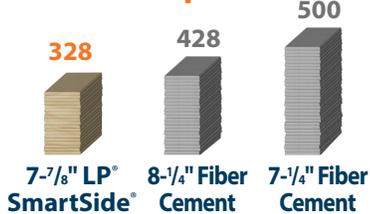
15 Squares



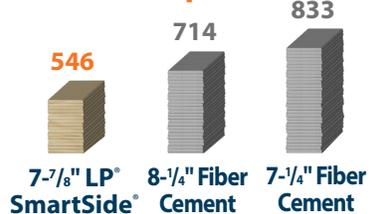
20 Squares



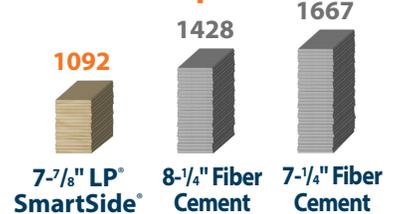
30 Squares



50 Squares



100 Squares



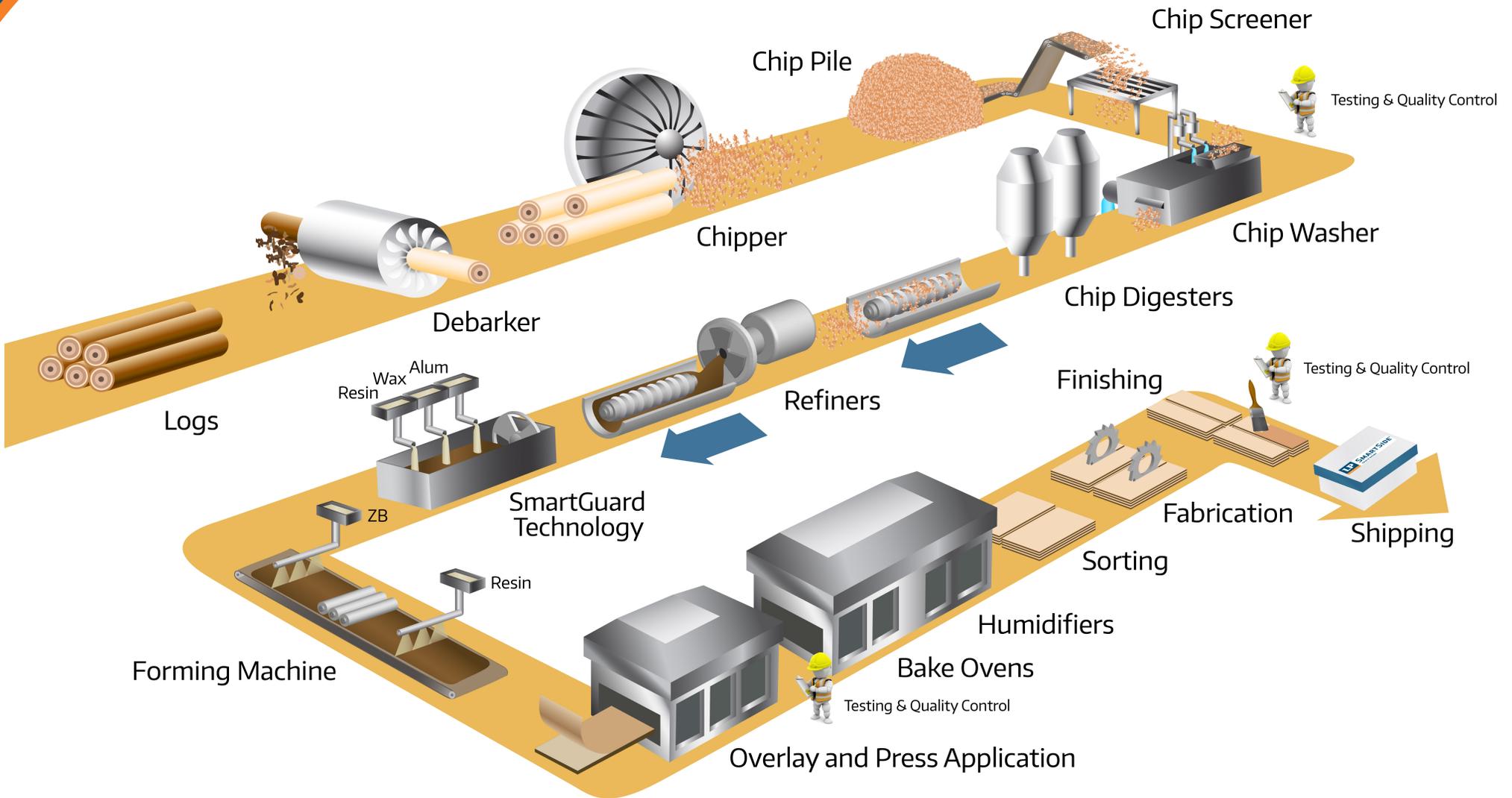
Plus ...

- LP SmartSide's longer lengths allow for fewer seams which saves time on installation
- Less breakage during installation saves time and materials
- No expensive diamond cutting blades needed

*Coverages are estimated based on product installation instructions. Actual SmartSide product use may vary.

Cal. Prop 65 Warning: Use of this product may result in exposure to wood dust, known to the State of California to cause cancer.

How is it Made: LP SmartSide Trim & Siding – Treated Engineered Wood Fiber Technology



GREEN BRIEF

LP® SmartSide® Trim & Siding products deliver the beauty of cedar, plus the durability and workability of engineered wood. We offer a complete line of primed trim, fascia, soffit, lap, and panel products that work and cut just like traditional wood, without the knots. Our LP SmartSide products are engineered with LP's proprietary SmartGuard® process to help protect against fungal decay and termites. And all of our SmartSide products are backed by a 5-Year, 100-Percent Labor and Replacement Guarantee, along with a 50-Year Prorated Limited Warranty on the substrate.

LP SmartSide & the Environment

Manufacturing

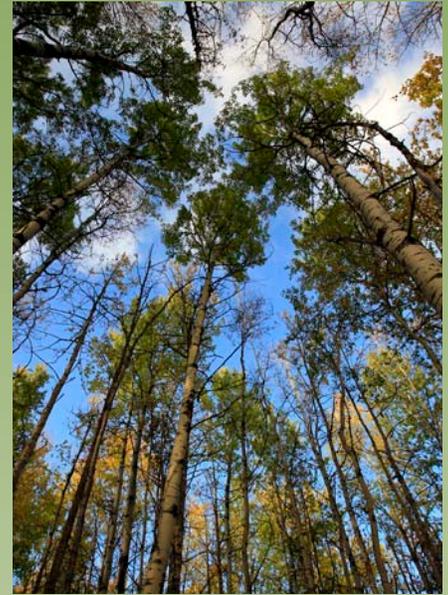
- LP SmartSide products are made from wood – a renewable, natural resource.
- Our wood procurement process targets small, fast growing trees that can be replenished more quickly than larger, older trees.
- We use SFTI® certified forest management and fiber sourcing systems to help ensure that our wood comes from well-managed forests.



- The entire log is used in our manufacturing process. All wood waste is repurposed or used to help fuel our mills.
- We only use low-emitting, safe resins in the manufacture of LP SmartSide products, and do not add any urea-formaldehyde.
- Our proprietary SmartGuard® manufacturing process utilizes zinc borate to help protect against fungal decay and termites.

Product Performance

- LP SmartSide products can help builders reduce waste on the jobsite:
 - The absence of knots helps reduce scrap woodpiles.
 - Longer product lengths reduce the number of pieces needed.
 - Extreme durability means less material lost to breakage.
- Our LP SmartSide products may help you achieve certification points in a number of leading green building programs.



Conserve. Create. Renew.

At LP, our approach to the environment can be summed up with three words: conserve, create and renew. As a leader in the building products industry, we view it as our responsibility to be good stewards of the environment and to develop and manufacture products that help builders build better homes.

To us, "green" is about conserving natural resources, creating products that help builders reduce waste, and finding ways to utilize renewable energy sources and reduce waste throughout our operations.

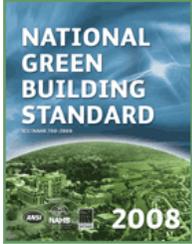
To learn more, please visit www.lpcorp.com or call 888.820.0325.



GREEN BUILDING CERTIFICATION PROGRAMS

The use of LP SmartSide may help you qualify for points in leading green building programs. The information below was compiled from relevant sections within each program and is for guidance only. This resource is designed to help you quickly identify areas where you could potentially earn points. Since program requirements vary and details may change, verify qualification criteria with each individual program. For specific questions related to LP products, please call 888.820.0325.

Single Family United States

PROGRAM	CATEGORY	SECTION	ITEM	DESCRIPTION	POINTS
	Resource Efficiency	Enhanced Durability and Reduced Maintenance	602.8	Termite-resistant materials	2 to 6
	Resource Efficiency	Renewable Materials; Biobased Products	606.1.b	Engineered wood	3 to 6
	Resource Efficiency	Renewable Materials; Certified Wood	606.2.e	Sustainable Forestry Initiative (SFI)	3 to 4
	Resource Efficiency	Renewable Materials	606.3	Materials used for major components are manufactured using renewable energy.	2
	Resource Efficiency	Renewable Materials; Resource Efficient Materials	607.1	Engineered wood	3
	Resource Efficiency	Indigenous Materials	608.1	Components used for major elements are extracted, processed, and manufactured within 500 miles.	2
 LEED for Homes	Innovation and Design Process	Innovative Design	ID 3.1, ID 3.2, ID 3.3, ID 3.4		up to 4
	Materials and Resources	Environmentally Preferable Products	MR 2.2	Local production. Use products that were extracted, processed, and manufactured within 500 miles of the home.	1/2 pt
 EarthCraft House™	Resource Efficiency	Local, Recycled, and/or Natural Content Materials	RE3	Use building materials extracted, processed and manufactured within 500 miles of site.	3
	Durability and Moisture Management	Products and Applications	DU 1.15	Siding; Exterior cladding with three or more sides and 40 year warranty	1
	Innovation	Project Specific Innovation Points	IN 1.3		TBD

GREEN BUILDING CERTIFICATION PROGRAMS

The use of LP SmartSide may help you qualify for points in leading green building programs. The information below was compiled from relevant sections within each program and is for guidance only. This resource is designed to help you quickly identify areas where you could potentially earn points. Since program requirements vary and details may change, verify qualification criteria with each individual program. For specific questions related to LP products, please call 888.820.0325.

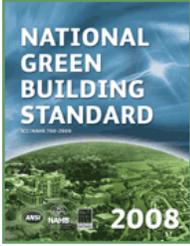
Single Family Canada

PROGRAM	CATEGORY	SECTION	ITEM	DESCRIPTION	POINTS
	Innovation and Design Process	Innovative Design	ID 3.1, ID 3.2, ID 3.3, ID 3.4		up to 4
	Materials and Resources	Environmentally Preferable Products	MR 2.2	Local production. Use products that were extracted, processed, and manufactured within 800 km (500 miles) of the home if moved by truck or within 2400 km (1500 miles) if moved by rail.	1/2 pt
	Exterior and Exterior Finishes	Exterior trim materials are made from alternatives to solid lumber	3-12		1
	Business Practice	Products used are manufactured within 800km	8-1		1 to 5
	Business Practice	Manufacturer has written environmental policy that includes office recycling and energy efficient lighting	8-6		1

GREEN BUILDING CERTIFICATION PROGRAMS

The use of LP SmartSide may help you qualify for points in leading green building programs. The information below was compiled from relevant sections within each program and is for guidance only. This resource is designed to help you quickly identify areas where you could potentially earn points. Since program requirements vary and details may change, verify qualification criteria with each individual program. For specific questions related to LP products, please call 888.820.0325.

Multi-Family and Commercial United States

PROGRAM	CATEGORY	SECTION	ITEM	DESCRIPTION	POINTS
	Resource Efficiency	Enhanced Durability and Reduced Maintenance	602.8	Termite-resistant materials	2 to 6
	Resource Efficiency	Renewable Materials; Biobased Products	606.1.b	Engineered wood	3 to 6
	Resource Efficiency	Renewable Materials; Certified Wood	606.2.e	Sustainable Forestry Initiative (SFI)	3 to 4
	Resource Efficiency	Renewable Materials	606.3	Materials used for major components are manufactured using renewable energy.	2
	Resource Efficiency	Renewable Materials; Resource Efficient Materials	607.1	Engineered wood	3
	Resource Efficiency	Indigenous Materials	608.1	Components used for major elements are extracted, processed, and manufactured within 500 miles.	2
 LEED for Homes	Innovation and Design Process	Innovative Design	ID 3.1, ID 3.2, ID 3.3, ID 3.4		up to 4
	Materials and Resources	Environmentally Preferable Products	MR 2.2	Local production. Use products that were extracted, processed, and manufactured within 500 miles of the home.	1/2 pt
 EarthCraft House Multifamily™	Resource Efficient Building Materials	Advanced Products	n/a	Engineered exterior trim including soffit, fascia, and trim	1
	Resource Efficient Building Materials	Durability	n/a	Exterior cladding (min 3 sides w/40 year warranty)	1
	Bonus Points		n/a	Use building materials extracted, processed, and manufactured within 500 miles of site.	1/2 pt.
 LEED 2009 for New Construction and Major Renovations	Materials and Resources	Regional Materials	MR 5	Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site.	1 to 2
	Indoor Environmental Quality	Low Emitting Materials: Composite Wood	IEQ 4.4	No added urea-formaldehyde	1
	Innovation in Design	Innovation in Design	ID 1.1, ID 1.2, ID 1.3, ID 1.4, ID 1.5		1 to 5

GREEN BUILDING CERTIFICATION PROGRAMS

The use of LP SmartSide may help you qualify for points in leading green building programs. The information below was compiled from relevant sections within each program and is for guidance only. This resource is designed to help you quickly identify areas where you could potentially earn points. Since program requirements vary and details may change, verify qualification criteria with each individual program. For specific questions related to LP products, please call 888.820.0325.

Multi-Family and Commercial Canada

PROGRAM	CATEGORY	SECTION	ITEM	DESCRIPTION	POINTS
	Innovation and Design Process	Innovative Design	ID 3.1 , ID 3.2, ID 3.3, ID 3.4		up to 4
	Materials and Resources	Environmentally Preferable Products	MR 2.2	Local production. Use products that were extracted, processed, and manufactured within 800 km (500 miles) of the home if moved by truck or within 2400 km (1500 miles) if moved by rail.	1/2 pt
 LEED Canada for New Construction and Major Renovations 2009	Materials and Resources	Regional Materials	MR 5	Use products that have been extracted, harvested, recovered and processed within 800 km (500 miles) (2,400 km if shipped by rail or water) of the final manufacturing site.	1 to 2
	Indoor Environmental Quality	Low Emitting Materials: Composite Wood	IEQ 4.4	No added urea-formaldehyde	1
	Innovation in Design	Innovation in Design	ID 1.1, ID 1.2, ID 1.3, ID 1.4, ID 1.5		1 to 5
	Exterior and Exterior Finishes	Exterior trim materials are made from alternatives to solid lumber	3-12		1
	Business Practice	Products used are manufactured within 800km	8-1		1 to 5
	Business Practice	Manufacturer has written environmental policy that includes office recycling and energy efficient lighting	8-6		1

To learn more about LP's environmental approach and to find out why the nation's leading builders choose engineered wood materials from LP Building Products, contact your LP sales representative, visit www.lpcorp.com, or call 888.820.0325.

Cal. Prop 65 Warning: Use of this product may result in exposure to wood dust, known to the State of California to cause cancer.

WHAT IS THE REAL COST?



AT RISK FOR HURRICANES AND TROPICAL STORMS



\$1.6 BILLION IN DAMAGE
in and around St. Louis, Missouri
April 28, 2012

\$900 MILLION
in damage in Dallas and Fort Worth, Texas
June 13, 2012



EXPERIENCED HAIL 1 INCH OR LARGER SINCE 2000

\$20 MILLION
in damage in Fort Wayne, Indiana
June 2013

\$250 MILLION
in damage in North Texas
May 15, 2013



ABOVE AVERAGE RISK OF TORNADOES



CHOOSE THE SIDING THAT'S ENGINEERED FOR HARSH CLIMATES - LP SMARTSIDE.

Watch extreme impact resistance comparison tests at lpsmartside.com.

SOURCES

« Hurricane and Tornado Risk Maps »
www.crisishq.com/why-prepare/us-natural-disaster-map/
« Hail Risk Map »
www.disastersafety.org/hail/protect-homes-from-damage/
« Rocks, Golf Ball and Baseball Impact Statistics »
NASA testing report
(Evaluation of Impact Damage Resistance of Two Types of Commercial Housing Siding)

« Storm Damage Statistics »
www.crh.noaa.gov/news/display_cmsstory.php?wfo=lsx&storyid=88129&source=0
www.srh.noaa.gov/fwd/?n=une132012
dfw.cbslocal.com/2013/05/24/north-texas-storm-tornado-damage-could-reach-250-million/
www.wthr.com/story/18950347/fort-wayne-storm-damage-likely-to-cost-millions

WHY YOU NEED TOUGH SIDING:

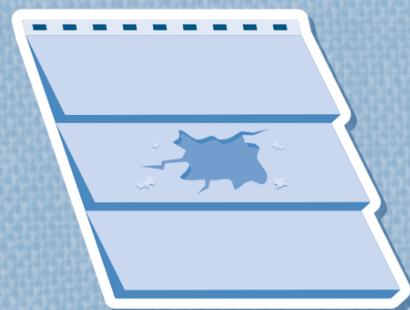
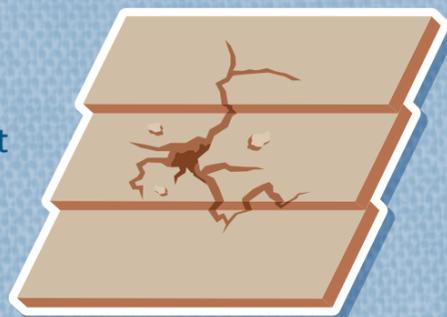
STUFF IS BOUND TO HIT YOUR HOME



WHAT WILL PROTECT YOUR HOME?

FIBER CEMENT SIDING

- A composite material made of sand, cement and cellulose fibers
- May crack upon impact

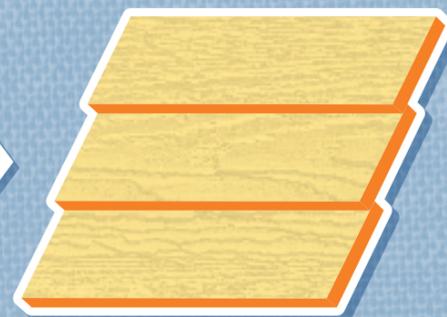


VINYL SIDING

- A plastic material made primarily of polyvinyl chloride (PVC)
- May crack upon impact

LP® SMARTSIDE® SIDING

- A uniquely durable engineered wood product that resists termites and fungal decay
- Highly impact resistant
- Stands up to hail and high winds



HOW WILL IT HOLD UP?



WHEN THE WIND REALLY BLOWS

LP SmartSide siding is made to withstand wind surges of up to 150 miles per hour when installed normally (*with nails hidden*). To withstand the same wind speeds, fiber cement would need to be installed with oversized, clearly visible nails.

WHEN HIT BY SMALL ROCKS

Small rocks shot at LP SmartSide at 107 miles per hour have barely left a mark. The same kinds of rocks can visibly damage fiber cement even at lower speeds.



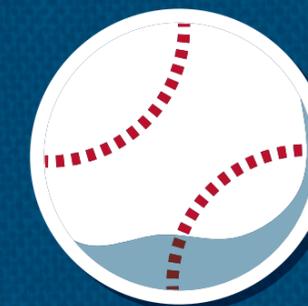
WHEN HIT BY A GOLF BALL

A golf ball traveling at 63 miles per hour left no visible damage to LP SmartSide siding. Golf balls moving at less than 50 miles per hour can visibly damage fiber cement.



WHEN HIT BY A BASEBALL

LP SmartSide has been hit by a baseball at 77 miles per hour and shown no visible damage. Slower-moving baseballs have put holes in fiber cement.



Help Weather The Storm With LP® SmartSide®

Wind, rain, snow, sleet, ice and hot weather challenge the siding on any home. LP SmartSide Trim & Siding are made with exterior grade resins that create strong bonds designed to withstand harsh weather elements and offer

greater impact resistance than leading fiber cement products and vinyl siding alternatives. This makes it an ideal choice for homeowners who would rather spend time enjoying their home than worrying about it.

**Table 1 —
Designing for
High Winds**

A comparison:

- Blind nailed
- 8" or 8-1/4" widths
- 16" o.c. stud application
- All data sourced from Texas Department of Insurance (TDI) Product Evaluation Reports

	TDI Product Evaluation	Allowable Design Pressure	Fastener Blind Nailed	Wood Studs 2x4 at 16" o.c.
LP SmartSide 8" Precision Series 38 Lap	EC-22	79 psf	8d Box H: 0.297" S: 0.113" L: 2-1/2"	Spruce-Pine-Fir
Maxi-Plank® 8-1/4" lap	EC-56	31 psf	11 gauge roofing nail H: 3/8" S: 0.120" L: 2"	Douglas Fir-Larch
CertainTeed 8-1/4" lap	EC-16	40 psf	6d H: 3/8" S: 0.120" L: 2"	Spruce-Pine-Fir
James Hardie 8-1/4" lap	EC-23	33.7 psf	11 gauge roofing nail H: 3/8" S: 0.120" L: 1-3/4"	Douglas Fir-Larch

This chart reflects information publicly available on the Texas Department of Insurance (TDI) website. TDI has not approved or sanctioned the use of this information for advertising purposes. TDI does not recommend any specific product for use in high wind zones or otherwise. Information on additional exterior siding products can be found at www.tdi.texas.gov.

To choose proper cladding options for high wind zones like those covered by the Texas Department of Insurance’s Wind Storm Inspection Program, you’ll need a few details:

- Building height
- Exposure category
- Wind speed requirement

Let’s locate the pounds per square foot (psf) required for an example home in the TDI Designated Catastrophe Area:

- 30’ building height
- Exposure C
- 130 mph 3-second gust required in TDI “Seaward” zone

Table 2, below, is an excerpt from the Engineered Wood Association (APA) Technical Topic TT-109 that summarizes Component and Cladding.

Table 2 — Zone 5 Siding Attachment Requirements for Suction Based on the 2006 and 2009 International Residential Codes (IRC) (Based on a mean roof height of 30 feet and located in Exposure B)

Wind Speed (mph)	85	90	100	105	110	120	125	130	140	145	150	170
Withdrawal Requirement (psf)	17.4	19.5	24.1	26.6	29.1	34.7	37.6	40.7	47.2	50.6	54.2	69.6

Footnotes to Table 2:

- (a) An effective wind area of 10 sq. ft. was used in accordance with Footnote (a) to Table R301.2(2) of the 2006 and 2009 IRC.
- (b) For other mean roof heights and wind exposures, values in the table above shall be multiplied by the adjustment factors in Table 3.

*The example is intended to show a comparison of siding products with similar application attributes. Many factors influence siding design pressure including fastener size, fastener patterns, roof height and siding width among them. Any of the products listed may see an increase or decrease in their allowable design pressure by varying these factors.

Zone 5 suction pressures per ASCE 7. ASCE 7 is a referenced document in the I-codes.

Notice that Table 2 is set for a building height of 30 feet and Exposure B. Since our building is in exposure C, we’ll have an additional step.

- 130 mph = 40.7 psf (exposure B)
- For a 30’ building height, the adjustment factor from exposure B to exposure C is 1.4
- $40.7 \times 1.4 = 56.98$ or 57 psf

For this example, siding with a design pressure of 57 psf or greater is required. LP SmartSide Siding meets this requirement.

Table 3 — Adjustment Factors

Mean Roof Height (ft.)	Exposure		
	B	C	D
15	1.00	1.21	1.47
20	1.00	1.29	1.55
25	1.00	1.35	1.61
30	1.00	1.40	1.66
35	1.05	1.45	1.70
40	1.09	1.49	1.75
45	1.12	1.53	1.78
50	1.16	1.56	1.81
55	1.19	1.59	1.84
60	1.22	1.62	1.87