



DERR FLOORING Co

7/19/2019

Engineered Hardwood with Densitek™ Core for Domestic Production

Bruce

Hartco

Capella

ROBBINS

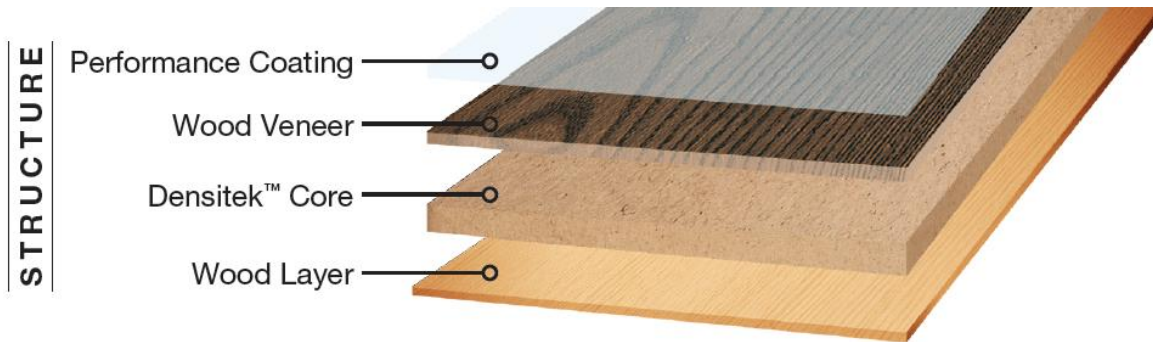


Made In The USA
Somerset, KY

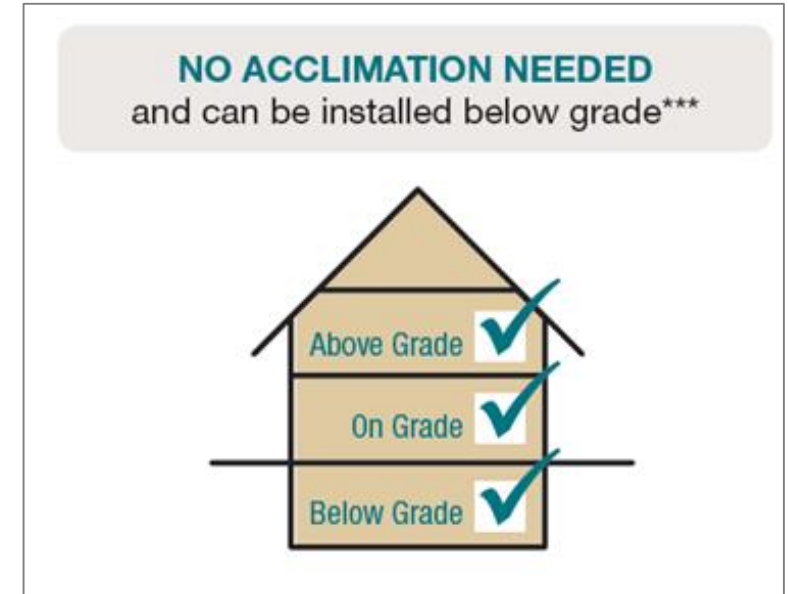
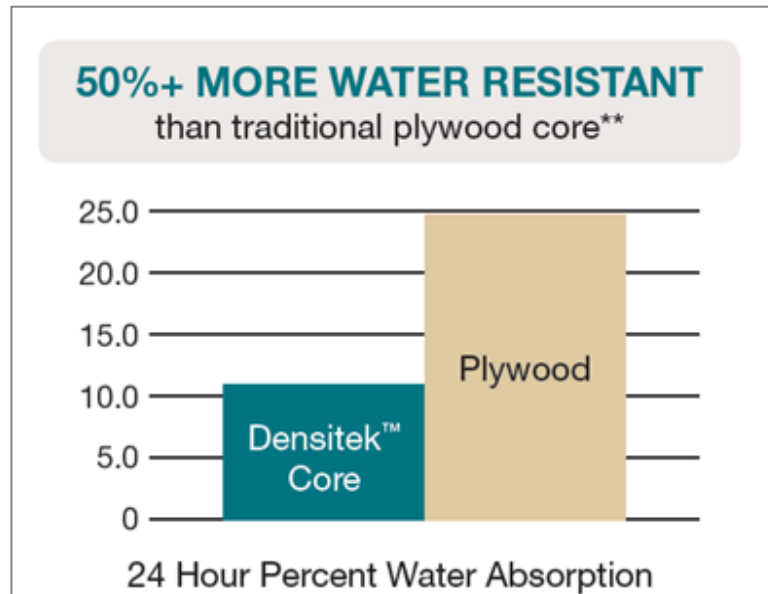
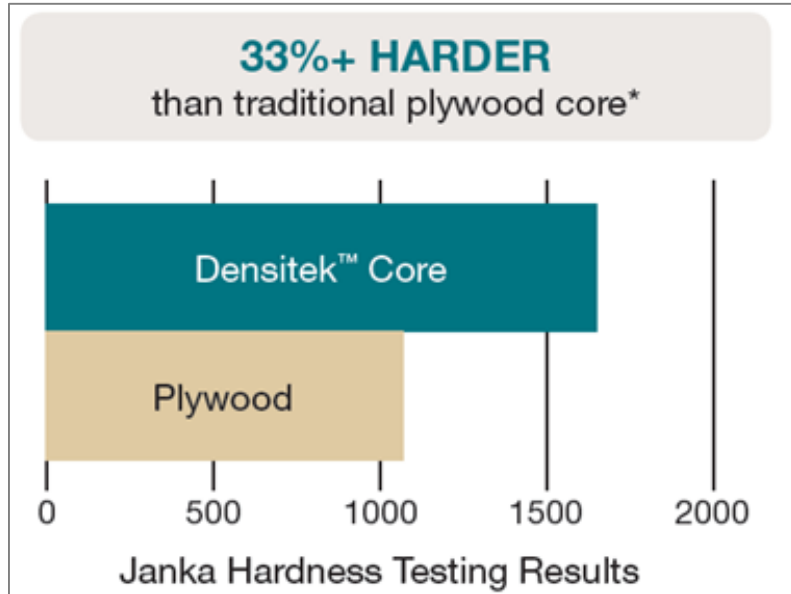
AHF™
PRODUCTS

What is Densitek™ Core?

- AHF Products' proprietary engineered hardwood composite material created by compressing real wood fibers
- More dense and less porous than solid wood and wood veneer for greater dent resistance, dimensional stability and moisture resistance
- Developed for domestically-produced engineered hardwood product lines



Advantages of Densitek™ Core



Delivers higher performance and faster installation compared to traditional plywood

Engineered Hardwood with Densitek™ Core Features & Benefits

Higher performance products

FEATURES	BENEFITS
Increased hardness of more than 33% versus plywood core*	Greater durability with higher impact- and dent-resistance; Fewer claims
Greater dimensional stability and moisture resistance**	Less edge peaking, swelling and warping and fewer claims; Works over concrete slabs, in basements and in rooms with radiant heating systems
Improved plank flatness and profile uniformity	Faster installation, less waste, better visual appeal
Now available in 5' length boards for domestically-produced tongue and groove products	Faster installation, better visual appeal
No acclimation needed and can be installed below grade***	Faster installation in all grade levels
Higher utilization of harvested timber	Lower impact on the environment

*Based on Janka hardness scale tests comparing AHF Products engineered hardwood with Densitek™ Core technology to engineered hardwood with plywood core (5-ply construction). Results reflect testing completed using 3/8" Northern Red Oak and 5/16" Southern Red Oak. Method: ASTM D-134

**Based on 24 hour percent water absorption tests comparing AHF Products 3/8" engineered hardwood with Densitek™ Core technology to engineered hardwood with plywood core (5-ply construction). Method: ASTM D-1037

***When AHF Products installation instructions and NWFA Guidelines are followed.

Engineered Hardwood with Densitek™ Core

Conversion Schedule

Conversion of domestic Engineered Hardwood product collections will begin in June 2019 and continue through March 2020

Phase 1 Mid June 2019

Color Collection 3" Maple L&F
Color Collection 5" Maple L&F
Color Collection 5" Oak L&F
Color Collection 3" Oak Lock N Fold
LnF American Home Series Distressed Oak 5"
LnF Turlington Cherry 5"
LnF Turlington Hickory 3"
LnF Turlington Hickory 5"
LnF Turlington Maple 3"
LnF Turlington Maple 5"
LnF Turlington Oak 3"
LnF Turlington Oak 5"
LnF Turlington Walnut 5"
LnF Turlington Oak 3"
LnF Mayflower ENW
Style Selections 3"
Style Selections 5"

*Conversion schedule
subject to change*

Phase 2 August 2019

Beaumont Plank
Beckford Plank
Capella Eng Wirebrushed
Capella Eng Hickory Scrape
Capella Eng Smooth 5/16"
Capella Eng Smooth 7/16"
Capella Maple Scrape
Colony Collection (T&G) EVS
Colony Collection (T&G) SFD
Century Farm SKY
Private label Century Farm
Springdale
Tur Signature Series
Turlington Am Exotic
Turlington Maple
Turlington-Oak
Wide Width Engineered Ash
Wide Width Engineered Hickory
Rural Living maple
Rural Living hickory
Prime Harvest-Oak
Prime Harvest-Hickory

Phase 3 December 2019

American Scrape - 1/2"
American Vintage Scrape 1/2 (Century Farms)
American Frontier
American Scrape
Armstrong CCA Scrape
Authentic Scrape/ American Vintage
Bruce Classic Scrape
Private Label Am Frontier
Private Label Am Scrape
Artisan Collective
THD Artisan Collective
THD Revolutionary Rustics
Performance Plus Low Gloss
Stained Performance Plus
American Honor
Early Canterbury
Blacksmith's Forge
Next Frontier

Phase 4 March 2020

TruTop 4mm 3.375"
TruTop 4mm 5"
TruTop 4mm 6.5"
Private label Eng 5.75
ProShield Eng CA
Robbins Light Brshd
Robbins Montrose
Robbins Rustic Scrape (Frontier)
Robbins Rustic Scrape (Legacy Manor)
Engineered Plano
Heritage Classics Exotics
Heritage Classics Maple
Heritage Classics Oak
Legacy Manor SKY
Metropolitan Classics
AHS Oak Dist
American Originals Distressed Exotics
American Originals Distressed Maple
American Originals Distressed Oak
Annadale 1/2 Eng
Sliced/Spliced Ash
THD Bruce ProShield

Transition Plan



Item Numbers

- As products are converted, the letters “EE” will be added to the end of the existing item number

Rural Living 5" Hickory Misty Gray

ERH5303A → ERH5303A**EE**

- No relabeling or resampling required

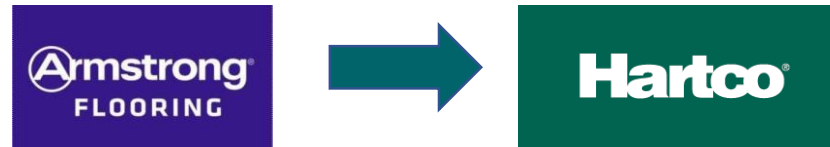


Existing Samples/ Selling Tools

Transition Plan

✓ Future Samples/ Selling Tools

- Will feature Densitek™ core construction and item numbers with new “EE” suffix
- Armstrong Flooring branded Wood collections included in this initiative will convert to Hartco branding. This will provide a head start toward AHF Products’ legal requirement to discontinue use of the Armstrong Flooring brand by Dec. 2020



- Hartco display graphics/POP updates are in development to convert existing Armstrong Flooring Wood displays to Hartco displays. Details will be forthcoming

Transition Plan



Specification Changes

- **Carton Weights**

Lock & Fold and Tongue & Groove SKUs: approximately +15% increase

- **Carton Lengths**

Tongue & Groove SKUs only: Changing from 4 ft. to 5 ft.

Engineered Hardwood with Densitek™ Core

Demo Kits for Customer Meetings

Hinged Comparison Product Sample
 Side 1: Densitek™ core
 Side 2: Plywood



Densitek™ core planks (3)



Plywood core planks (3)

Engineered Hardwood with Densitek™ Core

REAL WOOD FLOORING ENGINEERED TO PERFORM

AHE Products has modernized our domestically produced engineered hardwood construction with Densitek™ core, providing higher performance and faster installation, when compared to traditional plywood core. Made up of layers, engineered hardwood with Densitek™ core is constructed with a 100% natural wood veneer top, Densitek™ core and 100% wood bottom. Densitek™ core is an engineered wood composite material created by compressing real wood fibers. It is more dense and less porous than solid wood or wood veneer, offering greater dent resistance, dimensional stability and moisture resistance.

30%+ HARDER than traditional plywood core*	50%+ MORE WATER RESISTANT than traditional plywood core**	NO ACCLIMATION NEEDED and can be installed below grade***

FEATURES	BENEFITS
Increased hardness of more than 30% versus plywood core**	Greater durability with higher impact- and dent resistance. Fewer stains.
Greater dimensional stability and moisture resistance**	Less edge cracking, swelling and warping and fewer chairs. Works over concrete slabs, in basements and in areas with radiant heating systems.
Improved plank fitness and profile uniformity	Faster installation, less waste, better visual appeal.
Now available in 5" high looks for domestically produced tongue and groove products	Faster installation, better visual appeal.
No acclimation needed and can be installed below grade***	Faster installation in all grade levels.
Higher utilization of harvested timber	Lower impact on the environment.

*Based on Janka Hardness Testing (ANSI 101) after acclimation testing on a product consisting of a variety of real species of wood veneer on a traditional plywood core. Performance of AHE Products is based on the Janka core registered trademark of AHE Products.

**Based on 24-hour water absorption testing (ANSI 101) after acclimation testing on a product consisting of a variety of real species of wood veneer on a traditional plywood core. Performance of AHE Products is based on the Janka core registered trademark of AHE Products.

***Based on the product's ability to be installed below grade. All engineered hardwood with Densitek™ Core is engineered to be installed below grade. All engineered hardwood with Plywood Core is not designed to be installed below grade. All engineered hardwood with Plywood Core is not designed to be installed below grade.

Bruce

Hartco

Capella

ROBBINS

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Sell Sheet



Distributor Action Plan

Reinforce these key points:

- ❑ **Why Densitek™ core?** It delivers a higher performing product that is faster to install vs. products made with plywood core with no price change
- ❑ **Timing:** Conversion to Densitek™ core begins in June 2019 and continues through March 2020
- ❑ **Product visuals and textures:** No change (use Demo Kit)
- ❑ **Items numbers:**
 - SKUs will have an “EE” suffix after conversion
 - Existing item numbers can be used for product orders
- ❑ **Specifications:**
 - Carton weights will increase by approximately +15%
 - Carton lengths will increase from 4 ft. to 5 ft. for Tongue & Groove SKUs
- ❑ **Samples/selling tools:**
 - No relabeling or resampling for existing samples/tools
 - Future samples/tools will be made with new Densitek™ core and have “EE” suffix
 - Current Armstrong Flooring branded engineered hardwood collections will transition to Hartco branding as part of this conversion