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NWFA AND CATALINA RESEARCH OFFER THE 2009 MARKET INTELLIGENCE REPORT ON THE WOOD FLOORING INDUSTRY

Dear NWFA Member:

The NWFA is the sponsor of the 2009 edition of the Catalina Report on Wood Flooring, published by Catalina Research, Inc. As the sponsor, the NWFA has provided the Executive Summary Section of this in-depth analysis to the membership. **Association members also receive a \$400.00 discount on the purchase of the entire study.**

The Executive Summary includes the report's first section and the Scope and Methodology. The entire report consists of eight sections covering U.S. and worldwide markets. Manufacturers, distributors, and retailers turn to Catalina Research when analyzing demand for solid wood flooring, engineered wood flooring, prefinished wood flooring, and sales by species.

This in-depth investigation indicates how the \$1.6 billion wood flooring industry has increased its reliance on residential remodeling and replacement sales over the past decade. Data trends on species, pricing, residential and nonresidential building markets, residential remodeling spending, retail distribution channels, and customer demographics give wood flooring manufacturers and marketers information to develop strategies that allows wood flooring to make inroads in the U.S. floor coverings industry. Catalina Research also reviews the introduction of new products, plant investments, acquisitions, and distribution channels of major North American wood flooring manufacturers and marketers in order to uncover growth- and profit-oriented competitor strategies.

Take advantage of the findings uncovered in this valuable investigation to develop your own strategies to penetrate the North American wood flooring market. **Begin by profiting from your \$400.00 NWFA member discount. E-mail, fax, phone, or mail your order today and save.**

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WOOD FLOORING

DECEMBER 2009

CATALINA REPORT CR064

Published by Catalina Research, Inc.

17414 Via Capri East
Boca Raton, FL 33496
(561) 988-0853
Fax: (240) 358-4757
e-mail: editorial@informationgiant.com

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SECTION 1

U.S. WOOD FLOORING INDUSTRY TRENDS

Summary Of Major Findings

U.S. wood flooring manufacturer sales (shipments minus exports plus imports) are expected to begin to recover in 2010. The gain will primarily be in the second half of the year, and will be led by the upturn in the residential remodeling and replacement market. This is wood flooring's most important market. The upturn reflects the increase in existing home sales that began in the third quarter of 2009. There is usually a six-month to one-year lag from the sale of an existing home to consumers taking on a major remodeling project. The builder market could begin to show some life by the end of 2010, however, the nonresidential market is expected to continue to decline over the next year.

The recovery in the residential remodeling and replacement market will cause the wood flooring industry to increase its reliance on the retail distribution channel. Wood flooring suppliers are increasingly turning to Lumber Liquidators, Home Depot, and Lowe's to sell the retail customer. Lumber Liquidators sharply increased its position in wood flooring retailing in recent years due to an aggressive expansion of their chain and their strategy to target homeowners. Retailers have been targeting homeowners by offering prefinished floors that can be more easily installed in a wider array of applications. This has contributed to wood flooring's increasing share of total U.S. floor coverings sales on a square foot basis.

Retailers and manufacturers also benefited from the improved competitive pricing of wood flooring. The average value per square foot of wood flooring sold in the United States is estimated to decline between 2007 and 2010, while most competitive flooring products could show an increase in average prices over this period. Average wood flooring prices declined due to the sharp drop in lumber prices. The wood flooring market has also seen significant inroads made by lower-cost foreign-made products. In addition, rising imports increased the availability and sales of tropical species and bamboo flooring. Despite these trends, wood flooring remains

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a high-cost flooring product, keeping wood flooring a niche sector of the U.S. floor coverings market.

However, rising import penetration levels and declining sales between 2005 and 2009 sharply cut the profitability of U.S. wood flooring plants. These trends resulted in a deep cut in the number of U.S. wood flooring plants and wood flooring production capacity. It has also resulted in consolidation among the leading manufacturers and importers. Consolidation also reflects the aggressive expansion by Lumber Liquidators and acquisitions by Mohawk and Shaw.

These competitors, along with leader Armstrong, will benefit from the recovery in the U.S. economy over the next few years. The recovery is projected to strengthen in 2011 and 2012 before rising interest rates begin to hamper U.S. sales growth in 2013 or 2014.

Wood Flooring Sales Trends And Factors Driving Demand

The value of wood flooring sales (shipments minus exports plus imports) is estimated to increase by 2.2% to \$1.7 billion in 2010 (Table 1-1). Square foot sales are estimated to be 750 million square feet, a 2.5% increase over 2009 (Table 1-2). Catalina estimates that U.S. wood flooring sales will rise due to the upturn in existing home sales since the third quarter of 2009. In fact, U.S. existing home sales are estimated to increase by about 30.0% in the fourth quarter of 2009, and could rise by 5.7% for the entire year based on monthly trends (Table 5-4). This is important since the residential remodeling and replacement market is the most important end use for wood flooring manufacturers and marketers, and some 10.0% of purchases of existing homes initiate a hard surface flooring project within the first year of ownership (Tables 4-1 and 5-18). Wood flooring manufacturers may also receive a boost from the building market by the end of 2010, since the residential builder market could see some life in the second half of the year due to the significant upturn in residential housing starts and building permits in November 2009. On the other hand, U.S. wood flooring demand will be less affected by the continued

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downturn in nonresidential markets, since wood flooring is much less dependent on nonresidential market purchases than other sectors of the U.S. floor coverings market.

These trends compare to the sharp drop in U.S. wood flooring demand between 2005 and 2009, a period when residential demand contracted sharply. U.S. dollar wood flooring sales are estimated to have declined at an 11.9% compound annual rate and square feet sales decreased 10.9% annually. Over this period, total U.S. housing demand dropped at an 11.9% compound annual rate. This decline was led by the 20.2% per year contraction in new home completions. Nonresidential markets began to decline sharply during 2009 as recessionary trends moved throughout the economy.

Wood flooring manufacturers and marketers saw additional weakness in dollar sales due to weak pricing. Average wood flooring prices are estimated to have decreased at a 2.0% compound annual rate between 2006 and 2009. Average prices declined due to weak demand, the drop in lumber prices, and the growing availability of lower-cost imports. For example, the average value per square foot of wood flooring shipped from a U.S. plant is estimated to have been \$2.31 during 2009, compared to \$2.17 per square foot for imported products (Tables 2-2 and 3-1). Meanwhile, imports' share of total U.S. sales on a square foot basis nearly doubled between 2007 and 2009 to 30.5% (Table 3-2). As a result of rising import penetration levels, average U.S. manufacturer prices dropped from \$2.46 per square foot in 2006. This downward trend was facilitated by a 7.6% annual compound decline in lumber prices between 2006 and 2009 (Table 6-3).

Weakening prices adversely impacted wood flooring's share of U.S. floor coverings dollar sales over the past five years. In 2010, wood flooring is estimated to account for 9.2% of total U.S. floor coverings manufacturer dollar sales (Table 1-3). This is down from an estimated 9.3% share during 2009 and a record 10.8% in 2004. The decline reversed wood flooring's dollar share gain between 2000 and 2005. However, wood flooring continued to make inroads on a square foot basis as lower average prices stimulated consumer interest. On a square foot

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basis, wood flooring could represent 4.2% of total U.S. floor coverings sales in 2010. This is up from 4.1% in 2007 and 3.6% in 2002.

Changing Product Mix

Wood flooring manufacturers and marketers were able to stimulate consumer interest over the past decade by expanding the offerings of prefinished, engineered products; a wider range of species; and the introduction of bamboo flooring, rustic looks, and unique designs. The availability of prefinished, engineered wood floors also made wood flooring easier and less costly to install. The inroads made by engineered products have been most significant in markets where concrete slab construction is prevalent since engineered floors are designed for glue-down installation or float-in installation.

Catalina estimates that engineered wood flooring accounts for about 50.0% of total wood flooring sales on a square foot basis (Table 1-6). According to industry sources, engineered flooring's share was closer to one-third of the total wood flooring market in 2002. This trend is in line with Armstrong's product offerings. Armstrong, the leading supplier of wood flooring in the United States, has 52.9% of their total SKUs in engineered products, and the other 47.1% in solid flooring products. Also, according to the National Wood Flooring Association, prefinished products represented 48.0% of distributor sales in 2008, up from 43.0% in 2002 (Table 4-12).

In addition, U.S. manufacturers and marketers increased their focus on high-priced exotic species and bamboo flooring. However, oak, maple, hickory, and birch remain the most important species offered. At Armstrong, oak products represented 50.2% of total SKUs offered in 2009 and 40.7% of Shaw Hardwoods' product offerings. However, exotic species could account for about 30.0% of the total market, nearly double its position earlier in the decade. Brazilian cherry is an important exotic species sold in the United States (Table 3-4). Bamboo flooring is estimated to account for about 5.0% of total U.S. wood flooring sales. During 2009, U.S. bamboo flooring imports are estimated to have increased by 4.8% on a dollar basis and

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4.4% on a square foot basis (Table 3-7). This compares to double-digit declines for the entire U.S. wood flooring market during 2009 (Tables 1-1 and 1-2).

In addition, wood flooring suppliers are seeking to increase consumer preference for rustic looks, such as hand scraped and distressed wood floors. These products feature characteristic traits like wormholes, knots, saw marks, checks, and cracks. Manufacturers are utilizing these lines to move the customer upmarket, since these products generally sell at higher prices due to the increased labor costs involved in producing these floors. Armstrong indicates that 7.5% of their products offered are hand scraped and another 6.3% are distressed.

End-Use Markets And Distribution Channels

The wood flooring products mentioned above are increasingly being sold to homeowners since residential remodeling and replacement purchases are increasing in importance. Residential remodeling and replacement purchases are estimated to increase by 9.9% in 2010 or 51.7% of total U.S. sales (Table 4-1). This is up from 46.0% of total sales in 2007 and only 38.6% in 1997. Residential remodeling and replacement sales are estimated to rise in 2010 due to the 5.7% increase in existing home sales during 2009 (Table 5-4). However, growth in existing home sales is accelerating with an estimated 30.0% gain for the fourth quarter of 2009.

The residential remodeling and replacement market has primarily taken share from the builder market. The builder market is estimated to account for 24.3% of U.S. wood flooring sales in 2010. This is down from 36.8% in 2002. The drop reflects a 75.0% drop in U.S. housing starts between 2005 and 2009 or some 1.5 million housing units (Table 5-5). Sales to this market are estimated to decline at a 17.9% compound annual rate between 2007 and 2010, however, sales to this market are estimated to decrease by only 1.9% in 2010. In fact, wood flooring suppliers could begin to see a recovery in the builder market by the fourth quarter of 2009 due to the upturn in housing starts and residential building permits in November 2009. This is important to wood flooring suppliers since the builder market is more than twice as

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significant to the wood flooring market as to other sectors of the U.S. floor coverings industry (Table 5-1, Catalina Report on Floor Coverings).

Meanwhile, the decline in nonresidential market demand is estimated to accelerate in 2010 as the adverse effects of the recession pass through all sectors of the economy. Sales to nonresidential markets are estimated to decline by 9.6% in 2010 to \$329 million (in manufacturer dollars) or 19.8% of total U.S. sales. This compares to a 2.9% compound annual decline over the entire 2007 to 2010 period. The sharper decline in 2010 reflects the estimated 16.3% drop in nonresidential construction spending over the next year (Table 5-1).

The increasing importance of the residential remodeling and replacement market has made wood flooring manufacturers and marketers more reliant on the retail distribution channel. Between 2002 and 2007, U.S. wood flooring retail sales increased at a 6.4% compound annual rate, while the overall wood flooring market increased 2.2% annually (Tables 1-1 and 4-4). Retail sales also held up better as overall market sales declined between 2007 and 2009. U.S. wood flooring retail sales are estimated to be \$3.1 billion during 2009.

Over the past decade, home centers and hard surface flooring stores increased their importance to wood flooring manufacturers. During 2009, home centers are estimated to have accounted for 26.1% of total U.S. wood flooring retail sales and hard surface flooring stores another 19.7%. This is up from 5.9% and 12.1%, respectively, in 1997. On the other hand, specialty floor coverings stores' share is estimated to have dropped to 49.7% of total wood flooring retail sales, down from 79.7% in 1997. Specialty floor coverings stores have lost share to the aggressive expansion of the Home Depot, Lowe's, and Lumber Liquidator chains over this period. During 2009, Lumber Liquidators is estimated to account for 13.1% of total U.S. wood flooring retail sales, Home Depot 12.5%, and Lowe's 9.5% (Table 4-6). Lumber Liquidators experienced the sharpest share gains between 2007 and 2009 as the company added about 35 stores (Table 4-7). Lumber Liquidators' average store hardwood flooring and accessories sales were about \$2.2 million during 2009, compared to only some \$169,000 for

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the average retail seller of hardwood flooring (Table 4-5). As a result, Lumber Liquidators is able to offer customers a wide range of products at relatively profitable levels due to its economies of scale.

Competitive Environment

The increased reliance on the home center and hard surface flooring retail sectors has had an influence on the wood flooring manufacturing competitive environment. It has essentially led to industry consolidation. The top four competitors are estimated to capture 61.0% of the total U.S. supply (shipments plus imports) during 2009 (Table 6-8). This is up from 57.0% in 2008 and 51.9% in 2004.

Mohawk and Shaw took market share through acquisitions. In 2007, Mohawk acquired Columbia Flooring and Shaw acquired Anderson Hardwood Floors. Mohawk and Shaw made these acquisitions to take advantage of the growth of the home center channel and use their extensive distribution networks to supply specialty floor coverings stores.

In recent years, however, Lumber Liquidators made the most significant inroads in the U.S. market. In 2009, Lumber Liquidators is estimated to account for 10.3% of the total U.S. wood flooring supply (shipments plus imports), when their sales are converted to manufacturers dollars. This is nearly twice the share the company experienced in 2007. The company sources some 61.0% of their product from non-North American manufacturers, with their Asian manufacturers showing the sharpest growth.

This is in line with foreign-sourced products increasing their share of the U.S. market. During 2009, imports are estimated to account for 27.3% of total U.S. wood flooring dollar sales and 30.5% of square foot sales (Table 3-2). This is up from 3.7% and 5.3%, respectively, in 2002. The sharp increase in import penetration has caused U.S. manufacturers to cut production capacity. During 2009, the number of domestic plants specializing (plants with 50% or more of total revenues derived from the manufacture and sale of wood flooring) in wood

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flooring is estimated to drop to 84, down from 102 in 2002 (Table 6-1). Mohawk and Mullican contributed to this downward trend by each closing a plant during 2009.

Industry Profit Margins

Declining U.S. demand and rising competition from foreign-sourced products has sharply cut U.S. wood flooring plant profit margins between 2007 and 2009. Average plant gross profit margins are estimated to drop to 23.7% during 2009, down from 27.0% in 2007 (Table 6-2). This reversed the profit margin gains seen over the previous decade. Margins were especially hurt by a rising payroll/shipment ratio as labor productivity declined (Table 6-6). Margins were also hurt by rising wage rates, however, these costs were partially offset by declining lumber prices (Table 6-3).

Material cost pressures, however, may increase in the short term due to the passage of the Lacey Act and the need to receive Forest Stewardship Council (FSC) certification. FSC certification satisfies forest management and chain of custody issues, making FSC wood Lacey compliant. However, since the amount of FSC compliant lumber may not meet the industry's demand, FSC wood costs could rise along with the rebound in U.S. wood flooring sales. In addition, manufacturers are developing new processes to meet environmental requirements of residential and commercial building owners. For example, Shaw's Anderson subsidiary launched a new environmentally sensitive engineered product line in early 2009 using the company's PermaColor process. The PermaColor process creates natural color that goes all the way through the top veneer using no stains, chemicals, or solvents.

Forecast

The recovery in U.S. wood flooring sales is expected to strengthen in 2011 and 2012 as the U.S. economic recovery, which began in the third quarter of 2009, gives a boost to U.S. housing demand. However, as the economy strengthens, interest rates are projected to rise. By 2013 or 2014, rising interest rates could begin to cut into demand. As a result, Catalina

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forecasts U.S. wood flooring dollar sales to increase at a 3.1% compound annual rate between 2010 and 2015 and climb to \$1.9 billion in 2015 (Table 1-1). Square foot sales are projected to rise 2.7% annually to 857 million square feet (Table 1-2). These levels, however, remain below the record levels of U.S. sales seen in 2005 at the high point of the U.S. housing bubble. Growth is also expected to remain below the rates experienced between 1992 and 2002.

To offset sluggish domestic growth over the next five years, U.S. manufacturers are expected to increase their emphasis on export shipments. On a dollar basis, U.S. manufacturers are forecast to export 8.2% of total shipments in 2015, up from 7.3% during 2009. This increase in exports' importance may benefit from the weaker U.S. dollar, which makes U.S.-made wood flooring more competitive in world markets. Export sales are also receiving a boost from the agreements with Chinese companies by some of the leading U.S. producers to sell their products through Chinese retail channels.

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Table 1-1

Value Of U.S. Wood Flooring Sales, 1977-2015

(in millions of manufacturers' dollars)

	Wood Flooring Sales ¹	Percent Change
1977	\$173.9	—
1982	198.4	2.7% ²
1987	500.3	20.3 ²
1992	640.9	5.1 ²
1993	799.0	24.7
1994	918.2	14.9
1995	958.3	4.4
1996	908.1	-5.2
1997	1,233.1	35.8
1998	1,423.7	15.5
1999	1,614.6	13.4
2000	1,719.1	6.5
2001	1,824.7	6.1
2002	1,961.5	7.5
2003	2,150.6	9.6
2004	2,612.1	21.5
2005	2,697.6	3.3
2006	2,583.4	-4.2
2007	2,190.1	-12.1
2008 P	1,913.5	-12.6
2009 E	1,623.9	-15.1
2010 E	1,660.0	2.2
2015 F	1,933.8	3.1 ²
 CAGR:		
1992-1997	14.0%	—
1997-2002	9.7	—
2002-2007	2.2	—
2007-2010	-8.9	—
2010-2015	3.1	—

Notes: P = Preliminary
 E = Estimate
 F = Forecast
 CAGR = Compound annual growth rate

- 1 Shipments minus exports plus imports. Includes hardwood and softwood flooring, solid and engineered, and unfinished and finished products. Calculated from data in Tables 2-1, 3-1, and 4-16
- 2 5-year CAGR

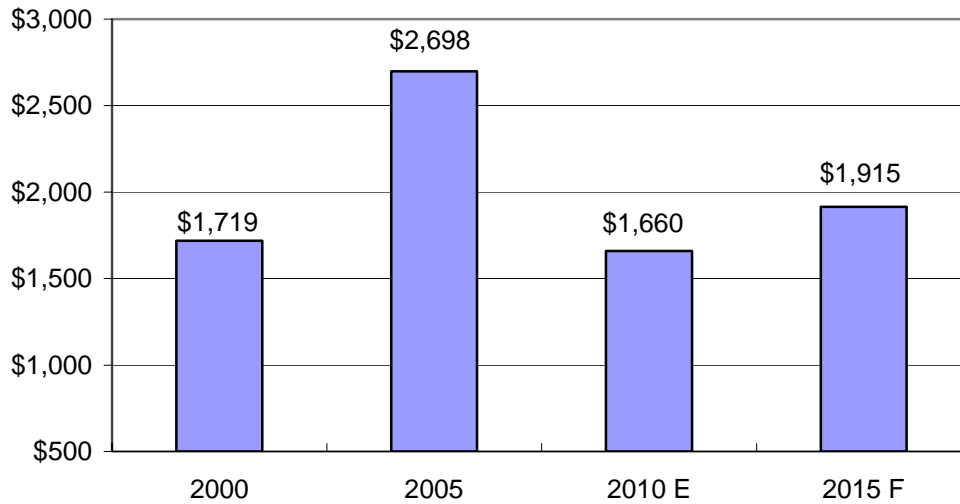
Source: U.S. Department of Commerce
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Figure 1-1

Value Of U.S. Wood Flooring Sales, 2000-2015

(in millions of manufacturers' dollars)



Notes: Shipments minus exports plus imports
E = Estimate
F = Forecast

Source: U.S. Department of Commerce
Compiled, calculated, estimated, and forecasted by
Catalina Research, Inc.

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Table 1-2

**Quantity U.S. Wood Flooring Sales And Average Value Per Square Foot Sold,
1992-2015**

(in million square feet)

	Quantity Sales ¹	Percent Change	Average Value Per Square Foot ²
1992	440.7	—	\$1.45
1993³	478.9	8.7%	1.67
1994³	523.0	9.2	1.76
1995³	549.0	5.0	1.75
1996³	543.9	0.9	1.67
1997	712.2	30.9	1.73
1998³	759.3	6.6	1.88
1999³	871.7	14.8	1.85
2000³	861.2	-1.2	2.00
2001³	867.7	0.8	2.10
2002	916.8	5.7	2.14
2003³	962.5	5.0	2.23
2004³	1,093.4	13.6	2.39
2005³	1,155.6	5.7	2.33
2006³	1,092.3	-5.5	2.37
2007³	979.0	-10.4	2.24
2008 P	850.7	-13.1	2.25
2009 E	728.2	-14.4	2.23
2010 F	750.0	2.5	2.21
2015 F	857.0	2.7 ⁴	2.26
CAGR:			
1992-1997	10.0%	—	3.6%
1997-2002	5.2	—	4.3
2002-2007	1.3	—	0.9
2007-2010	-8.5	—	-0.6
2010-2015	2.7	—	0.5

Notes: E = Estimate
F = Forecast
P = Preliminary
CAGR = Compound annual growth rate

- 1 Shipments minus exports plus imports. Includes hardwood and softwood flooring, solid and engineered, and unfinished and finished products. Calculated from data in Tables 2-3, 3-1, and 4-16
- 2 Calculated from data in Table 1-1. In manufacturers' dollars
- 3 Estimated based on dollar shipments
- 4 5-year CAGR

**Source: U.S. Department of Commerce
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Table 1-3

Wood Flooring's Position In The U.S. Floor Coverings Market, 1992-2015

(in millions of dollars and square feet)

	Total U.S. Floor Coverings Dollar Sales ¹	Wood Flooring Percent Total Floor Coverings ²	Floor Coverings Square Feet Sales ¹	Wood Flooring Percent Total Floor Coverings ²
1992	\$12,307.2	5.2%	16,904.0 ³	2.6%
1997	15,764.8	7.8	20,684.2	3.4
2002	20,431.0	9.6	25,394.2	3.6
2003	21,373.4	10.1	25,997.7	3.7
2004	24,090.6	10.8	27,995.3	3.9
2005	25,343.3	10.6	27,989.4	4.1
2006	25,522.9	10.1	26,787.1	4.1
2007	22,736.9	9.6	23,737.5	4.1
2008 P	20,161.4	9.5	20,491.0	4.2
2009 E	17,442.0	9.3	17,398.0	4.2
2010 E	18,097.0	9.2	17,954.7	4.2
2015 F	21,493.4	8.9	19,593.0	4.3

Notes: E = Estimate
F = Forecast
P = Preliminary

- 1 Shipments minus exports plus imports for carpet and area rugs, hardwood and softwood flooring, ceramic and stone floor and wall tile, resilient sheet and floor tile, and laminate flooring
In manufacturers' dollars
- 2 Calculated from data in Tables 1-1 and 1-2
- 3 Excludes laminate flooring

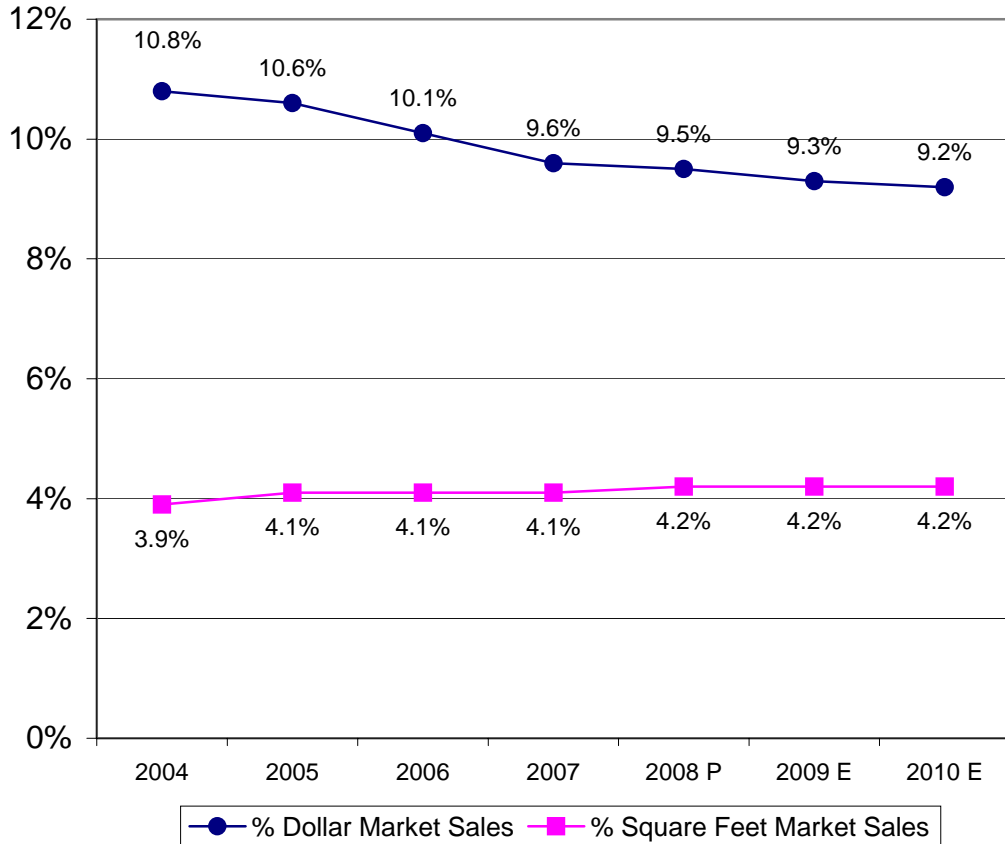
**Source: U.S. Department of Commerce
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Figure 1-2

Wood Flooring's Share Of The Total U.S. Floor Coverings Market, 2004-2010

(percent of total floor coverings sales)



Notes: E = Estimate
P = Preliminary

Source: U.S. Department of Commerce
Compiled, calculated, and estimated by
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Table 1-4

Wood Flooring's Position In The U.S. Hard Surface Floor Coverings Market, 1992-2015

(in millions of dollars and square feet)

	<u>Total U.S. Hard Surface Floor Coverings Sales¹</u>	<u>Hard Surface Percent Total Floor Coverings²</u>	<u>Wood Flooring Percent Total Hard Surface Flooring³</u>
<u>Dollar sales¹</u>			
1992	\$3,555.2 ⁴	28.9%	18.0%
1997	5,382.1	34.1	22.9
2002	7,945.8	38.9	24.7
2003	8,701.9	40.7	24.7
2004	10,100.0	41.9	25.9
2005	10,662.4	42.1	25.3
2006	10,793.5	42.3	23.9
2007	9,564.4	42.1	22.9
2008 P	8,458.7	42.0	22.6
2009 E	7,295.8	41.8	22.3
2010 E	7,582.6	41.9	21.9
2015 F	9,242.2	43.0	20.9
<u>Square feet sales¹</u>			
1992	4,670.3 ⁴	27.3%	9.4%
1997	5,886.4	28.0	12.1
2002	7,612.6	29.1	12.0
2003	8,234.5	30.3	11.7
2004	9,266.6	31.5	11.8
2005	9,555.2	32.3	12.1
2006	9,760.0	34.2	11.2
2007	8,870.2	37.4	11.0
2008 P	7,800.4	38.1	10.9
2009 E	6,649.6	38.2	11.0
2010 E	6,894.6	38.4	10.9
2015 F	7,739.2	39.5	11.1

Notes: E = Estimate
F = Forecast
P = Preliminary

- 1 Shipments minus exports plus imports for hardwood and softwood flooring, ceramic and stone floor and wall tile, resilient floor coverings, and laminate flooring. In manufacturers' dollars
- 2 Calculated from data in Table 1-3
- 3 Calculated from data in Tables 1-1 and 1-2
- 4 Excludes laminate flooring

Source: U.S. Department of Commerce
Compiled, calculated, estimated, and forecasted by
CATALINA RESEARCH, INC.

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Table 1-5

U.S. Wood Flooring Shipments, Exports, And Imports, 1992-2015

(in millions of square feet and dollars)

	1992	1997	2002	2007 E	2010 E	2015 F
Dollars¹						
Shipments	\$672.8	\$1,279.9	\$1,959.8	\$2,018.4	\$1,306.8	\$1,514.9
Exports	46.9	78.3	71.3	137.7	96.7	124.2
Percent shipments	7.0%	6.1%	3.6%	6.8%	7.4%	8.2%
Imports²	\$15.0	\$31.5	\$73.0	\$309.4	\$449.9	\$543.1
Percent domestic sales³	2.3%	2.6%	3.7%	14.1%	27.1%	28.1%
Domestic sales³	\$640.9	\$1,233.1	\$1,961.5	\$2,190.1	\$1,660.0	\$1,933.8
Square feet						
Shipments	462.9	735.8	907.9	889.2	568.2	655.2
Exports	32.7	42.8	39.3	62.9	45.5	60.9
Percent shipments	7.1%	5.8%	4.3%	7.1%	8.0%	9.3%
Imports	10.5	19.2	48.2	152.2	227.3	262.7
Percent domestic sales³	2.4%	2.7%	5.3%	15.6%	30.3%	30.7%
Domestic sales³	440.7	712.2	916.8	978.5	750.0	857.0

Notes: Includes hardwood and softwood flooring, solid and engineered, and unfinished and finished products.
E = Estimate
F = Forecast

- 1 In manufacturers' dollars
- 2 Value is cost plus insurance and freight (CIF)
- 3 Shipments minus exports plus imports

**Source: U.S. Department of Commerce
Compiled, calculated, estimated, and forecasted by
CATALINA RESEARCH, INC.**

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Table 1-6

**U.S. Solid And Engineered Wood Flooring Shipments, Exports, And Imports,
2007-2009**

(in millions of square feet)

	<u>2007</u>	<u>2008</u>	<u>2009 E</u>
<u>Solid wood flooring</u>			
Shipments ¹	460.0	335.6	283.2
Exports ²	56.9	56.4	37.5
Percent shipments	12.3%	16.8%	13.2%
Imports ²	74.3	139.6	123.4
Percent sales ^{1,3}	15.6%	33.3%	33.4%
Domestic sales ^{1,3}	477.4	418.9	369.1
Percent total wood flooring sales	48.8%	49.2%	50.7%
<u>Engineered wood flooring</u>			
Shipments ¹	429.7	321.2	266.7
Exports ²	6.0	8.1	6.2
Percent shipments	1.4%	2.5%	2.3%
Imports ²	77.9	118.7	98.6
Percent sales ^{2,3}	15.5%	27.5%	27.5%
Domestic sales ^{2,3}	501.6	431.8	359.1
Percent total wood flooring sales	50.1%	50.8%	49.3%

- 1 Estimated by Catalina Research
- 2 Estimated based on U.S. Department of Commerce data.
- 3 Shipments minus exports plus imports
- 4 Calculated from data in Tables 1-1 and 1-2

Source: CATALINA RESEARCH, INC.

Wood Flooring

Table 1-7

U.S. Sales For Hardwood And Softwood Flooring, 1992-2010

(in millions of square feet and dollars)

<u>Material</u>	<u>1992</u>	<u>1997</u>	<u>2002</u>	<u>2007</u>	<u>2010 E</u>
<u>Hardwood flooring</u>					
Square feet	416.0	687.2	877.5	930.1	716.3
Percent total wood flooring	94.4%	96.5%	95.7%	95.0%	95.5%
Value ¹	\$632.0	\$1,225.8	\$1,934.3	\$2,140.1	\$1,626.0
Percent total wood flooring	98.6%	99.4%	98.6%	97.7%	98.0%
Avg. value per sq. ft. ¹	\$1.52	\$1.78	\$2.20	\$2.30	\$2.27
<u>Softwood flooring</u>					
Square feet	24.6	25.0	39.3	48.8	33.7
Percent total wood flooring	5.6%	3.5%	4.3%	5.0%	4.5%
Value ¹	\$8.9	\$7.6	\$27.2	\$49.9	\$34.0
Percent total wood flooring	1.4%	0.6%	1.4%	2.3%	2.0%
Avg. value per sq. ft. ¹	\$0.36	\$0.30	\$0.69	\$1.02	\$1.01

Notes: Shipments minus exports plus imports. Includes solid and engineered and unfinished and finished products
 A square foot is equal to a board foot one inch thick; 144 cubic inches
 Calculated from data in Tables 2-3, 2-4, 3-3, and 4-18
 E = Estimate
 Sq. ft. = Square feet

1 In manufacturers' dollars

Source: **U.S. Department of Commerce
 Compiled, calculated, and estimated by
 CATALINA RESEARCH, INC.**

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Table 1-8

**U.S. Average Value Per Square Foot Of Flooring Supplied By Product Sector,
1997-2010**

(in manufacturers' dollars)

Product sector	1997	2002	2007	2008 P	2009 E	2010 E
Carpet and area rugs¹	\$0.70	\$0.70	\$0.89	\$0.92	\$0.94	\$0.97
Wood flooring²	1.73	2.14	2.24	2.25	2.23	2.21
Ceramic floor and wall tile	1.02	0.90	1.01	1.08	1.04	1.01
Vinyl sheet and floor tile³	0.50	0.56	0.58	0.63	0.65	0.65
Rubber sheet and floor tile⁴	2.09	2.29	2.56	2.64	2.67	2.68
Other resilient flooring⁵	0.47	0.33	0.27	0.25	0.25	0.25
Laminate flooring⁴	2.00	1.45	1.10	1.02	1.00	0.99
Stone flooring⁶	3.75	4.40	4.55	4.60	4.57	4.54
Total floor coverings	\$0.76	\$0.80	\$0.96	\$0.98	\$1.00	\$1.02

Notes: Not installed
 P = Preliminary
 E = Estimate based on monthly trends from the Bureau of Labor Statistics

- 1 Includes sales of roll goods, bathmats, area rugs, auto and aircraft carpeting, and artificial grass
- 2 Includes hardwood and softwood flooring, solid and engineered, and unfinished and finished products
- 3 Estimated by *Floor Covering Weekly* from 1997 to 2001
- 4 Estimated by Catalina Research, Inc.
- 5 Includes sales of flooring made of cork, other plastics, and linoleum
- 6 Stone flooring is defined as modular stone tile used exclusively for flooring. This means that the data is not directly comparable with ceramic tile, which includes wall tile. For more information, see the Catalina Report on Stone Products.

**Source: U.S. Department of Commerce
 Compiled, calculated, and estimated and by
 CATALINA RESEARCH, INC.**

Wood Flooring

Table 1-9

U.S. Producer Price Trends For Hardwood Flooring And Competing Floor Coverings, 1992-2010

(index base 1986=100)

	<u>Hardwood Flooring</u>	<u>Percent Change</u>	<u>Carpet And Rugs</u>	<u>Resilient Flooring¹</u>	<u>Ceramic Tile</u>
1992	116.8	—	108.5	123.6	109.8
1993	133.2	14.0%	107.8	126.3	111.4
1994	140.5	5.5	109.1	128.1	112.8
1995	139.3	-0.9	110.7	132.8	114.6
1996	133.0	-4.5	113.2	133.3	114.4
1997	146.9	10.5	114.8	133.7	114.1
1998	161.4	9.9	115.4	133.4	110.8
1999	151.5	-6.1	114.5	132.5	110.8
2000	152.0	0.3	116.9	133.3	108.3
2001	151.2	-0.5	118.0	131.5	99.3
2002	145.2	-4.0	118.1	132.4	87.2
2003	158.9	10.1	120.8	135.4	86.2
2004	177.0	10.8	123.6	138.4	86.2
2005	172.5	-2.5	131.8	146.3	88.1
2006	164.6	-4.6	139.1	151.4	90.0
2007	158.2	-3.9	140.5	154.8	89.7
2008	156.5	-1.1	143.5	166.1	92.3
2009 E	153.7	-1.8	148.9	170.9	91.1
2010 E	151.9	-1.2	153.7	170.4	88.3
CAGR:					
1992-1997	4.7%	—	1.1%	1.6%	0.8%
1997-2002	-0.2	—	0.6	-0.2	-5.3
2002-2007	1.7	—	3.5	3.2	0.6
2007-2010	-1.4	—	3.0	3.2	-0.6

Notes: Index indicates percent price changes for base year, 1986
Includes price changes for imported products
E = Estimate based on the first ten months of 2009
CAGR = Compound annual growth rate

1 Vinyl and rubber

Source: Bureau of Labor Statistics
Compiled, calculated, and estimated by
CATALINA RESEARCH, INC.

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Table 1-10

U.S. Producer Price Trends For Oak And Other Wood Flooring, 2004-2010

(index base December 2003)

	<u>Oak Flooring</u>	<u>Other Wood Flooring</u>
2004	104.9	105.9
2005	99.0	108.8
2006	90.8	110.4
2007	85.9	108.7
2008	84.3	108.7
2009 E	81.8	108.6
2010 E	80.5	108.3
<u>CAGR:</u>		
2004-2009	-4.8%	0.5%
2009-2010	-1.6	-0.3

Notes: Index indicates percent price change from base period, December 2003
Includes price changes for imported products
E = Estimate based on the first ten months of 2009
CAGR = Compound annual growth rate

Source: **Bureau of Labor Statistics**
Compiled, calculated, and estimated by
CATALINA RESEARCH, INC.

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Table 1-11

Monthly U.S. Producer Price Trends For Hardwood Flooring, 2007-2009

(index base June 1984)

<u>Month</u>	<u>2007</u>	<u>2008</u>	<u>Percent Change</u>	<u>2009</u>	<u>Percent Change</u>
January	154.0	154.4	0.3%	150.2	-2.7%
February	153.6	153.3	-0.2	149.5	-2.5
March	153.6	152.6	-0.7	149.0	-2.4
April	154.0	151.7	-1.5	149.1	-1.7
May	153.7	151.5	-1.4	149.8	-1.1
June	153.3	152.3	-0.7	147.4	-3.2
July	153.3	152.8	-0.3	148.8	-2.6
August	154.1	152.8	-0.8	151.4	-0.9
September	155.2	151.8	-2.2	150.1	-1.1
October	154.0	151.8	-1.4	150.0	-1.2
November	155.1	151.9	-2.1	149.9 E	-1.3
December	155.6	151.5	-2.6	149.8 E	-1.2
Annual Average	154.1	152.4	-1.1%	149.6 E	-1.8%

Notes: Index indicates percent price change from base period, June 1984
Includes price changes for imported products
E = Estimate

Source: **Bureau of Labor Statistics**
Compiled, calculated, and estimated by
CATALINA RESEARCH, INC.

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Table 1-12

Gross Plant Profit Margins For Hardwood Flooring Plants And The U.S. Floor Coverings Industry Average, 1982-2009

(percent total plant revenues)

	<u>Hardwood Flooring Plants</u>	<u>U.S. Floor Coverings Industry¹</u>
1982	24.9%	21.9%
1987	26.3	23.3
1992	27.9	27.6
1997	23.5	29.0
2002	25.3	29.1
2007	27.0	36.3
2009 E	23.7	33.0

Notes: Payroll and material costs percent total plant revenues before allocation of supplemental labor costs consisting of employer benefit programs, Social Security, and other legally required payments
E = Estimate

1 Includes plants specializing (50% or more of total plant revenues) in carpets and area rugs, hardwood flooring, ceramic tile, and resilient sheet and floor tile

Source: U.S. Department of Commerce
Compiled, calculated, and estimated by
CATALINA RESEARCH, INC.

SCOPE AND METHODOLOGY

The Catalina Report on Wood Flooring is a guide to the growth and profit opportunities in the manufacturing, importing, and U.S. and worldwide distribution of hardwood and softwood flooring. This comprehensive database covers U.S. shipments, imports and exports, residential and nonresidential markets, retail sales, the installation contractor business, factors affecting domestic demand and distribution, the cost structure of hardwood flooring plants, the competitive environment, and the world market situation. In addition, major North American- and foreign-based manufacturers are profiled in order to uncover competitor strategies.

U.S. sales are calculated from U.S. Department of Commerce statistics by collecting data on domestic plant shipments, subtracting exports, and adding imports (Section 1). Sales are calculated on a dollar and square foot basis and calculated as a share of total U.S. floor coverings sales (shipments minus exports plus imports) and hard surface flooring sales. Catalina Research uses the measurement of board feet and square feet interchangeably. The average value per square foot supplied is calculated and compared with other floor coverings materials. Catalina also estimates the share of sales that are solid versus engineered. In addition, hardwood flooring plant profit margins are compared with the U.S. floor coverings industry average. Section and report findings are summarized in our Executive Summary in order for readers to quickly review the present and future health of this industry and assess whether their company's performance is in line with industry trends.

Section 2 analyzes U.S. shipments of hardwood and softwood flooring, as well as solid and engineered flooring. Hardwood shipments are segmented into oak and maple flooring and other hardwood flooring products. Shipments are for all domestic manufactures, whether plants are owned by U.S.- or foreign-based companies, and whether or not plants specialize (50% or more of total facility revenues) in wood flooring.

Section 3 rounds out the total U.S. supply by evaluating the role of foreign-based companies in the U.S. market. Data trends include import statistics which are derived from U.S.

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Customs records. Import data is provided by product and by major country of origin. For the 2009 edition, import data was expanded to include exotic species and bamboo.

Wood flooring end-use markets and retail distribution channels are analyzed in Section 4. Hardwood flooring purchases are provided for new residential construction and residential remodeling markets, new nonresidential construction and commercial contract markets, as well as transportation equipment markets. This data is based on U.S. Department of Commerce surveys. Section 4 also analyzes the wood flooring installation business and retail hardwood flooring sales by type of outlet. Share is calculated for the leading retailers. In addition, the size of the wholesale business is also evaluated. *Hardwood Flooring* magazine survey results cover distribution and installation contractor revenues by type of product, species, and finish sold. In addition, U.S. export trends are included in order to determine world market opportunities.

Catalina investigated the factors driving domestic demand and distribution by analyzing U.S. construction activity and total floor covering retail sales (Section 5). Residential housing statistics include data on new housing completions, existing home sales, and mobile home placements. Housing starts and residential building permits track current trends in new residential construction markets. The characteristics of newly completed U.S. housing units are also provided. These data include the average value of new housing units. Homeowner hard surface flooring spending is analyzed as well. In addition, data are provided on household demographics and economic trends. Retail floor covering sales by type of outlet is provided, including monthly sales trends of specialty floor coverings sales. Nonresidential construction trends are tracked by type of building.

Catalina supplies data on the cost structure and profitability of U.S. plants specializing (50% or more of total plant revenues) in the manufacture and sale of hardwood flooring (Section 6). U.S. Department of Commerce survey data covering these plants are supplemented with individual company profiles and sales data in order to provide growth- and profit-oriented

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strategies and company market shares (Sections 7 and 9). Annual reports, trade journals, and databases were searched.

The Canadian market situation is evaluated from Statistics Canada data (Section 8). Data trends include plant shipments, exports, and imports, as well as a review of the leading manufacturers. The European market is also investigated, as well as trends in the Chinese and Brazilian wood flooring markets. This data was used to estimate the world wood flooring market.

Action-oriented executives are urged to use this comprehensive statistical database and the competitor information to develop new products, penetrate end-use markets, target key demographic markets, expand foreign market sales, and initiate profitable operating strategies. Executives are urged to compute their own company's market share and compare their company's operating ratios to the industry averages as part of this process.