# Excerpt

## North American Wood Panels Forecast | APRIL 2006

### Overview

Below are the Table of Contents, List of Tables, and excerpts from the *North American Wood Panels Forecast*. This report covers plywood, oriented strandboard (OSB), particleboard, medium density fiberboard (MDF), and hardboard. Each issue contains an executive summary and overviews of the North American and international economies and housing. The report includes in-depth examinations of the various markets in addition to over 120 analytical tables by product area.

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## Excerpt–Executive Summary

U.S. GDP growth will begin to slow in 2006 as rising interest rates begin to take their toll on the U.S. economy. The slowdown will be exacerbated in 2007 by the forecast slowdown in residential construction. Real GDP growth will rebound in late 2008 and 2009.

## Excerpt–Economic Outlook

The U.S. and Canadian economies carried considerable momentum into 2006 and will likely maintain decent growth through the second quarter. Thereafter, we expect U.S. (and eventually Canadian) economic growth to dip below trend in the second half of 2006 and the first half of 2007 due to the lagged effect of higher interest rates, as well as a sharp slowdown in mortgage equity withdrawal (which has propped up U.S. consumer spending). Our U.S. forecast shows real growth dipping to 2.6% in the four quarters ending in 2Q07. Our forecast shows WTI oil prices remaining in the \$57–\$67 range over the rest of 2006 and then dropping to \$51 by the end of 2007 and \$44 by the end of 2009, thanks to slowing demand in China as well as a price-induced increase in energy supplies. Finally, we do not see any substantial swings in exchange rates over the two-year forecast horizon. Further out, we see a modest depreciation of the U.S. dollar, rather than the plunge envisaged by many.

## Excerpt–Housing and Other Demand Indicators

Housing starts will remain in the 1.90–2.00 million-unit range through the first half of 2006. Interest rates only began to rise in earnest in the second half of 2005, and it typically takes eight to 12 months for rising interest rates to affect housing starts. Moreover, rapid home price inflation has led to significant investment demand for housing. Home prices need to slip before this investment driven construction cools. Finally, although it has fallen, builder confidence remains positive (the NAHB's housing market index for single-family sales over the next six months was at 62 in March, an indication that the majority of builders surveyed expect continued strength in 2006).

## Excerpt–N.A. Structural Panel Markets

Total North American structural panel consumption reached a record 45.8 BSF in 2005, 3% or 1.4 BSF above the previous record set in 2004. Given RISI’s forecasts for lower housing starts in 2006, it is unlikely that another new record will be set this year. Nevertheless, we expect a less than 2% drop in total consumption to 44.9 BSF, close to the 2004 level (Table 1).

## Excerpt–Particleboard Markets

Over the forecast, we expect annual North American particleboard consumption to trend lower through most of 2008, before renewed cyclical strength boosts consumption late in the year 2008 and in 2009. Subsequently, further weakness in 2010 will again cause consumption to drop.

## Excerpt–N.A. MDF Markets

North American MDF consumption in 2005 reached a record 3.69 BSF, almost 7% ahead of 2004, though this growth rate was slower than the previous year. Strong growth in residential consumption (particularly laminate flooring and moulding) boosted total demand even as weak domestic furniture production caused industrial consumption to decline. Similar end-use patterns in 2006 will boost total demand to 3.82 BSF. This slower growth will occur as construction markets weaken, particularly after mid-year.

## Excerpt–N.A. Hardboard Markets

Total hardboard demand dropped 3% in 2005, after a more moderate 1% decline the previous year. The increase came as strong new residential construction activity over the past two years supported exterior demand as interior consumption continued to decline. Exterior hardboard demand (siding and trim) held at 2.39 BSF in 2005, equal to 2004.

## Sample Table

### Table A21
### U.S. Structural Panel Consumption by End-Use Categories
Billion Board Feet, 3/8 Inch Basis

| | 05:III | 05:IV | 06:I | 06:II | 06:III | 06:IV | 07:I | 07:II | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **STRUCTURAL PANELS - ALL TYPES** | | | | | | | | | | | | | | | |
| Total | 11.58 | 10.34 | 9.29 | 11.17 | 11.08 | 9.69 | 8.30 | 9.99 | 40.74 | 42.14 | 41.24 | 37.62 | 41.08 | 43.65 | 42.56 |
| Single-Family Homes | 6.03 | 5.23 | 4.55 | 5.70 | 5.28 | 4.37 | 3.48 | 4.51 | 20.26 | 21.78 | 19.90 | 16.18 | 18.77 | 19.91 | 18.92 |
| Multifamily Homes | 0.39 | 0.41 | 0.37 | 0.36 | 0.38 | 0.40 | 0.34 | 0.33 | 1.52 | 1.55 | 1.51 | 1.47 | 1.62 | 1.63 | 1.59 |
| Mobile Homes | 0.18 | 0.12 | 0.16 | 0.20 | 0.20 | 0.19 | 0.17 | 0.20 | 0.68 | 0.63 | 0.74 | 0.80 | 0.93 | 0.99 | 0.95 |
| Nonresidential Cons. | 0.43 | 0.41 | 0.37 | 0.39 | 0.43 | 0.43 | 0.39 | 0.43 | 1.78 | 1.59 | 1.62 | 1.77 | 1.93 | 2.13 | 2.20 |
| Industrial Markets | 1.99 | 2.00 | 2.03 | 2.05 | 2.05 | 2.06 | 2.08 | 2.10 | 7.79 | 7.96 | 8.18 | 8.47 | 9.09 | 9.40 | 9.37 |
| R&R: Total | 2.42 | 2.03 | 1.67 | 2.31 | 2.54 | 2.10 | 1.66 | 2.22 | 8.06 | 8.06 | 8.62 | 8.18 | 7.92 | 8.84 | 8.78 |
| Improvements | 2.23 | 1.87 | 1.55 | 2.14 | 2.36 | 1.94 | 1.53 | 2.04 | 7.39 | 7.41 | 7.99 | 7.47 | 7.11 | 8.07 | 8.04 |
| Maintenance and Repair | 0.19 | 0.16 | 0.12 | 0.16 | 0.18 | 0.16 | 0.13 | 0.18 | 0.66 | 0.65 | 0.63 | 0.71 | 0.81 | 0.77 | 0.75 |
| Exports - Total | 0.15 | 0.13 | 0.15 | 0.17 | 0.19 | 0.15 | 0.18 | 0.20 | 0.65 | 0.56 | 0.67 | 0.75 | 0.82 | 0.74 | 0.74 |
| To Canada | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.05 | 0.05 | 0.05 | 0.31 | 0.24 | 0.25 | 0.21 | 0.26 | 0.26 | 0.25 |
| Overseas | 0.09 | 0.07 | 0.09 | 0.11 | 0.12 | 0.10 | 0.12 | 0.15 | 0.35 | 0.32 | 0.42 | 0.54 | 0.56 | 0.48 | 0.49 |
| **PLYWOOD** | | | | | | | | | | | | | | | |
| Total | 4.57 | 4.14 | 3.79 | 4.38 | 4.37 | 3.87 | 3.37 | 3.77 | 16.73 | 16.86 | 16.40 | 14.08 | 12.20 | 11.08 | 10.36 |
| Single-Family Homes | 1.54 | 1.33 | 1.11 | 1.38 | 1.25 | 1.00 | 0.74 | 0.92 | 5.34 | 5.57 | 4.73 | 3.12 | 2.24 | 1.55 | 1.29 |
| Multifamily Homes | 0.11 | 0.12 | 0.10 | 0.10 | 0.10 | 0.10 | 0.08 | 0.08 | 0.45 | 0.45 | 0.41 | 0.31 | 0.18 | 0.11 | 0.08 |
| Mobile Homes | 0.03 | 0.02 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.11 | 0.10 | 0.11 | 0.08 | 0.03 | 0.00 | 0.00 |
| Nonresidential Cons. | 0.19 | 0.18 | 0.16 | 0.17 | 0.18 | 0.18 | 0.16 | 0.17 | 0.80 | 0.70 | 0.68 | 0.65 | 0.54 | 0.45 | 0.40 |
| Industrial Markets | 1.52 | 1.53 | 1.55 | 1.56 | 1.56 | 1.56 | 1.57 | 1.57 | 5.98 | 6.11 | 6.23 | 6.28 | 6.41 | 6.38 | 6.24 |
| R&R: Total | 1.07 | 0.90 | 0.75 | 1.02 | 1.11 | 0.90 | 0.69 | 0.88 | 3.60 | 3.56 | 3.79 | 3.12 | 2.27 | 2.07 | 1.85 |
| Improvements | 1.00 | 0.84 | 0.70 | 0.96 | 1.05 | 0.85 | 0.64 | 0.82 | 3.35 | 3.32 | 3.56 | 2.89 | 2.06 | 1.90 | 1.70 |
| Maintenance and Repair | 0.07 | 0.06 | 0.04 | 0.06 | 0.07 | 0.06 | 0.05 | 0.06 | 0.25 | 0.23 | 0.23 | 0.23 | 0.21 | 0.17 | 0.15 |
| Exports - Total | 0.11 | 0.08 | 0.10 | 0.12 | 0.13 | 0.11 | 0.12 | 0.14 | 0.45 | 0.38 | 0.45 | 0.52 | 0.53 | 0.51 | 0.50 |
| To Canada | 0.04 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.16 | 0.12 | 0.11 | 0.09 | 0.10 | 0.13 | 0.11 |
| Overseas | 0.07 | 0.05 | 0.07 | 0.09 | 0.10 | 0.08 | 0.10 | 0.12 | 0.28 | 0.26 | 0.34 | 0.43 | 0.43 | 0.39 | 0.39 |
| **ORIENTED STRANDBOARD** | | | | | | | | | | | | | | | |
| Total | 7.01 | 6.19 | 5.50 | 6.80 | 6.72 | 5.82 | 4.93 | 6.22 | 24.01 | 25.27 | 24.84 | 23.53 | 28.88 | 32.57 | 32.20 |
| Single-Family Homes | 4.48 | 3.90 | 3.44 | 4.32 | 4.03 | 3.38 | 2.74 | 3.59 | 14.92 | 16.21 | 15.17 | 13.05 | 16.53 | 18.37 | 17.63 |
| Multifamily Homes | 0.28 | 0.29 | 0.26 | 0.26 | 0.28 | 0.29 | 0.26 | 0.26 | 1.07 | 1.10 | 1.09 | 1.16 | 1.43 | 1.52 | 1.50 |
| Mobile Homes | 0.15 | 0.10 | 0.14 | 0.17 | 0.17 | 0.16 | 0.15 | 0.18 | 0.57 | 0.53 | 0.64 | 0.72 | 0.90 | 0.99 | 0.95 |
| Nonresidential Cons. | 0.24 | 0.24 | 0.21 | 0.23 | 0.25 | 0.25 | 0.24 | 0.27 | 0.98 | 0.90 | 0.94 | 1.12 | 1.39 | 1.68 | 1.80 |
| Industrial Markets | 0.46 | 0.47 | 0.48 | 0.49 | 0.49 | 0.50 | 0.51 | 0.53 | 1.81 | 1.85 | 1.95 | 2.18 | 2.69 | 3.02 | 3.13 |
| R&R: Total | 1.35 | 1.13 | 0.92 | 1.28 | 1.43 | 1.19 | 0.97 | 1.34 | 4.46 | 4.50 | 4.83 | 5.06 | 5.65 | 6.76 | 6.94 |
| Improvements | 1.23 | 1.03 | 0.84 | 1.18 | 1.31 | 1.09 | 0.89 | 1.22 | 4.04 | 4.09 | 4.43 | 4.58 | 5.06 | 6.17 | 6.34 |
| Maintenance and Repair | 0.12 | 0.10 | 0.08 | 0.10 | 0.12 | 0.10 | 0.09 | 0.12 | 0.42 | 0.41 | 0.40 | 0.48 | 0.60 | 0.60 | 0.60 |
| Exports - Total | 0.04 | 0.06 | 0.05 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | 0.21 | 0.18 | 0.22 | 0.23 | 0.29 | 0.23 | 0.24 |
| To Canada | 0.02 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.14 | 0.12 | 0.14 | 0.12 | 0.16 | 0.14 | 0.14 |
| Overseas | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.06 | 0.06 | 0.08 | 0.11 | 0.13 | 0.09 | 0.10 |