Trends and Opportunities for Plastic Profiles in Residential Construction

Profiles 2014
Philadelphia, PA
Presentation Outline

• New home construction review & outlook
• Remodeling industry review & outlook
• Usage trends in windows, patio doors, decking, railing, siding, exterior trim, and plastic piping
• Spotlight opportunities for plastic profiles
Volatility is Trademark of Residential Construction Industry Since Early 2000’s

• Run-up of new home production in early to mid-2000’s
  • Materials selection trended strongly towards natural & high-end
  • Market dominated by values/preferences of baby boomers
• Housing market crash initially sent volumes plummeting **but** high-end materials and features escalate
• Recession caused major re-calibration of home buyer/owner expectations, favoring low-end materials
• Since bottoming-out in 2010, a slow return to normal—but not the pre-recession “normal”
• Especially robust rebound underway in multifamily housing
  • Materials volume—less than halfway back to peak of mid-2000’s
  • Led by younger, more urban buyers
Current Outlook in Housing

- Household formations still tepid for foreseeable future
  - Highest average household size in decades (3.14)
  - Jobs, higher incomes & consumer confidence needed
- Multifamily primarily rental units, shift from suburb to urban
  - Accelerating “green building,” construction more resembles non-residential
- Single family rebounding more slowly (home values, financing)
- Skilled jobsite labor shortage among concerns
  - Smaller pool of construction workers—left the industry at recession
  - Higher share of job seekers entered (or returned) to school during recession
  - Outmigration of immigrants, now lower immigration rates
- Residential developments not keeping up with anticipated demand—
  - Lack of available development land, smaller tracts, regulations/zoning
  - Teardowns, infill, and low-quality lots much larger share
Overview of Remodeling Industry—When Do We Get to the New Normal?

• Before 2006, easy financing & high home sales fueled remodels
• High-end materials benefitted most in run-up
• After peaking in 2007, remodeling spending fell by ~25%
• With recession, homeowners immediately became more cost-conscious
  • Many low-cost products rebounded after long slide
  • DIY segment rebounded
  • Likelihood of repairing (vs. replacing) increased
• Energy upgrades boom with tax credits, then fall
• By 2011, the space crunch hits:
  • 6.1% of Owner-Occupied homes add living space in 2011
  • 8.4% add space in 2013 (mostly conversions)
• HIW share of total sales continues to rise
• Continued positive industry outlook at present
  • Still value-conscious, but less than during recession
Shares of New Single Family Homes by Price-Point

Source: Annual Builder Practices Survey
Growth in New Home Starts, 2012 - 2013

Source: National Association of Home Builders
Windows Use in New U.S. Homes, 2013

- Vinyl, 64%
- Wood, 3%
- Un clad Wood, 3%
- Wood, aluminum clad, 11%
- Wood, vinyl clad, 10%
- Aluminum, 11%
- Composite & Other, 3%

Source: Annual Builder Practices Survey
Trend in Windows for New Homes

Source: Annual Builder Practices Survey
Windows in U.S. Home Remodeling, 2013

- Vinyl, 49%
- Aluminum, 13%
- Unclad Wood, 11%
- Wood, aluminum clad, 4%
- Wood, vinyl clad, 7%
- Composite & Other, 15%

Source: Annual Consumer Practices Survey
Trends in Windows for Remodeling

Source: Annual Consumer Practices Survey
Patio Doors in New Homes, 2013

- Vinyl, 32%
- Unclad Wood, 4%
- Aluminum clad wood, 18%
- Vinyl clad wood, 13%
- Steel, 9%
- Aluminum, 8%
- Fiberglass/Composite, 17%

Source: Annual Builder Practices Survey
Trends in Patio Doors for New Homes

Source: Annual Builder Practices Survey
Patio Doors in Remodeling, 2013

- Unclad Wood, 21%
- Vinyl, 18%
- Fiberglass/Composite, 18%
- Aluminum, 17%
- Steel, 8%
- Wood, aluminum clad, 11%
- Wood, vinyl clad, 7%

Source: Annual Consumer Practices Survey
Trends in Patio Doors for Remodeling

Source: Annual Consumer Practices Survey
Deck & Porch Surface for New Homes, 2013

- Treated wood, 46%
- Wood Plastic Composite, 34%
- PVC & other plastic, 6%
- Cedar, 7%
- Redwood, 2%
- Other untreated wood, 5%

Source: Annual Builder Practices Survey
Trends in Deck & Porch Surfaces, New Homes

Source: Annual Builder Practices Survey
Deck & Porch Surface for Home Remodeling, 2013

- Treated wood, 55%
- Cedar, 14%
- Redwood, 8%
- Other untreated wood, 4%
- Wood Plastic Composite, 16%
- PVC & other plastic, 2%

Source: Annual Consumer Practices Survey
Trends in Deck & Porch Surface in Home Remodeling

Source: Annual Consumer Practices Survey
Exterior Wall Finish in New Homes, 2013

Engineered Wood, 10%
Stucco, 19%
Brick, 16%
Fiber Cement, 18%
Vinyl, 22%
Stone, 9%
Natural Wood, 5%
Other, 1%

Source: Annual Builder Practices Survey
Trends in Exterior Wall Finish, New Homes

Source: Annual Builder Practices Survey
Exterior Wall Finish in Home Remodeling, 2013

- **Vinyl**, 37%
- **Fiber Cement**, 11%
- **Engineered Wood**, 14%
- **Natural Wood**, 13%
- **Stucco**, 10%
- **Metal & Other**, 8%
- **Brick**, 3%
- **Stone**, 4%

Source: Annual Consumer Practices Survey
Trends in Exterior Wall Finish, Home Remodeling

Source: Annual Consumer Practices Survey
Exterior Trim and Fascia on New Homes, 2012

- Aluminum Wrap, 21%
- Engineered Wood, 21%
- Natural Wood, 17%
- Vinyl Wrap/Profile, 10%
- Plastic/Composite, 6%
- Fiber Cement, 16%
- Other, 9%

Source: Annual Builder Practices Survey
Exterior Trim & Fascia for Home Remodeling, 2013

- Natural Wood + Plywood, 34%
- Vinyl Wrap/Profile, 16%
- Plastic/Composite, 12%
- Fiber Cement, 6%
- Engineered Wood (MDF, OSB), 8%
- Aluminum Wrap, 17%
- Other, 7%

Source: Annual Consumer Practices Survey
Trend in Exterior Trim & Fascia, Remodeling

Source: Annual Consumer Practices Survey
Hot & Cold Water Distribution Piping, New Homes 2013

- PEX (or PEX-AL-PEX), 65%
- CPVC, 24%
- Copper, 11%
- DWV?
- Sprinkler? 85% PVC
- 66% PVC

Source: Annual Builder Practices Survey
Trend in Hot & Cold Water Distribution Piping, New Homes

Source: Annual Builder Practices Survey
Opportunities

• Reduce cost—evidence shows price hikes decrease demand where alternatives exist
• Increased strength of plastic profiles
• Reduced expansion coefficient
• More natural appearance
• Reduce maintenance costs
• Contribute to home energy efficiency
• Improve perceptions of plastic profiles as “green” alternative
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