



**Home Innovation**  
RESEARCH LABS

# Window and Door Market Trends & Opportunities

Review of Home Innovation Research Lab's  
Builder & Consumer Practices Data

Finding Innovation a Home

# Home Innovation Research Labs

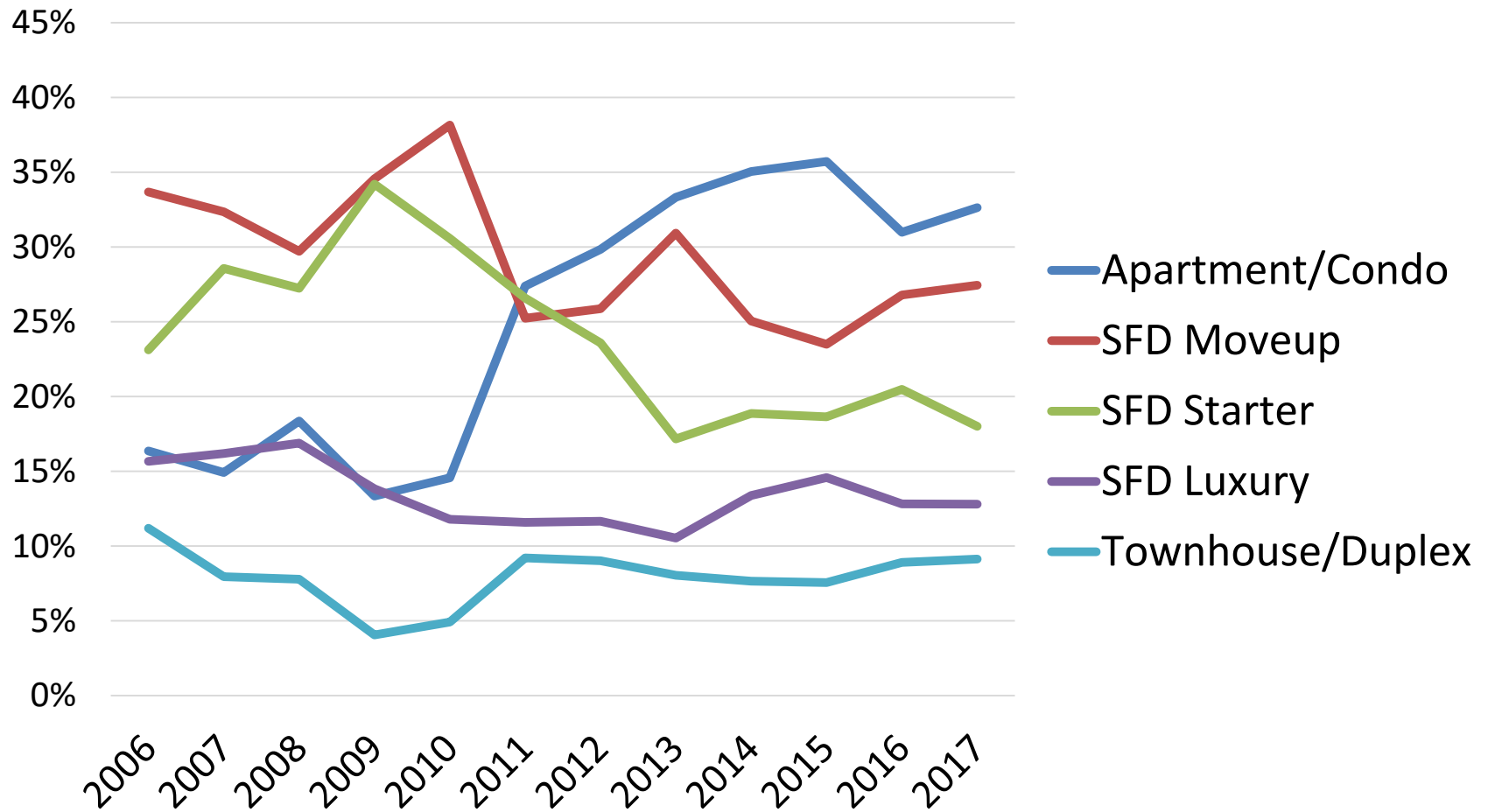
- Founded in 1964 as a wholly-owned subsidiary of NAHB
- Independent, for-profit researchers assisting development and commercialization of new building technologies
  - Engineering research & development
  - Market & field research
  - Laboratory testing
- #1 in green home building certification (NGBS)
- Building codes and standards developers
- Partners with ICC-ES to fast-track issuance of ESRs



# Annual Builder & Consumer Practices Surveys

- Home Innovation has been tracking annual materials purchases since 1995
  - Builder Practices Survey of 1,500 U.S. Builders
  - Consumer Practices Survey of 100,000+ U.S. households
- Reports comprise residential U.S. new homes and home remodeling markets for building materials
- Data development methods includes balancing by 1) geographic area 2) builder size 3) purchase volumes and 4) homeowner demographics

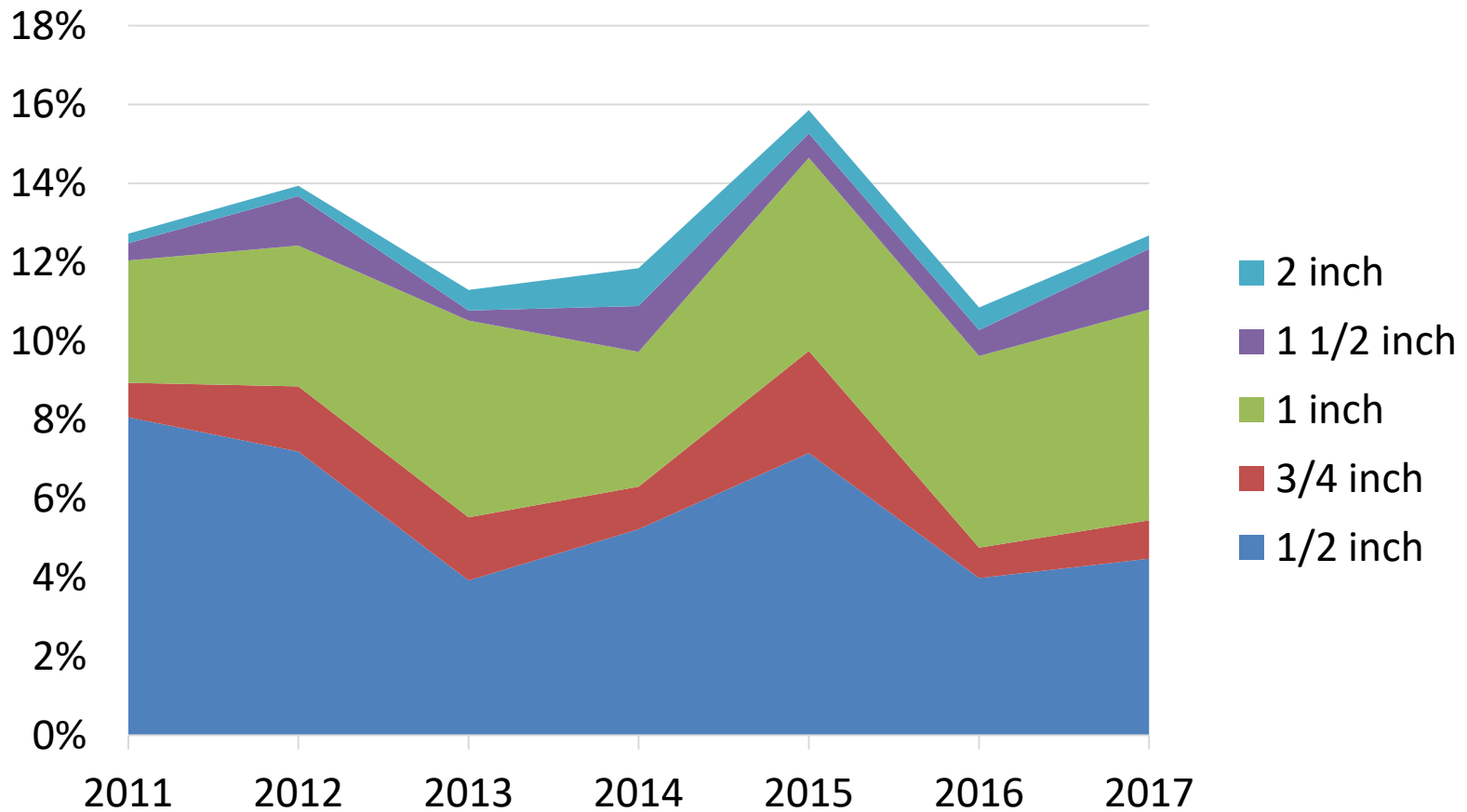
# U.S. New Housing Mix



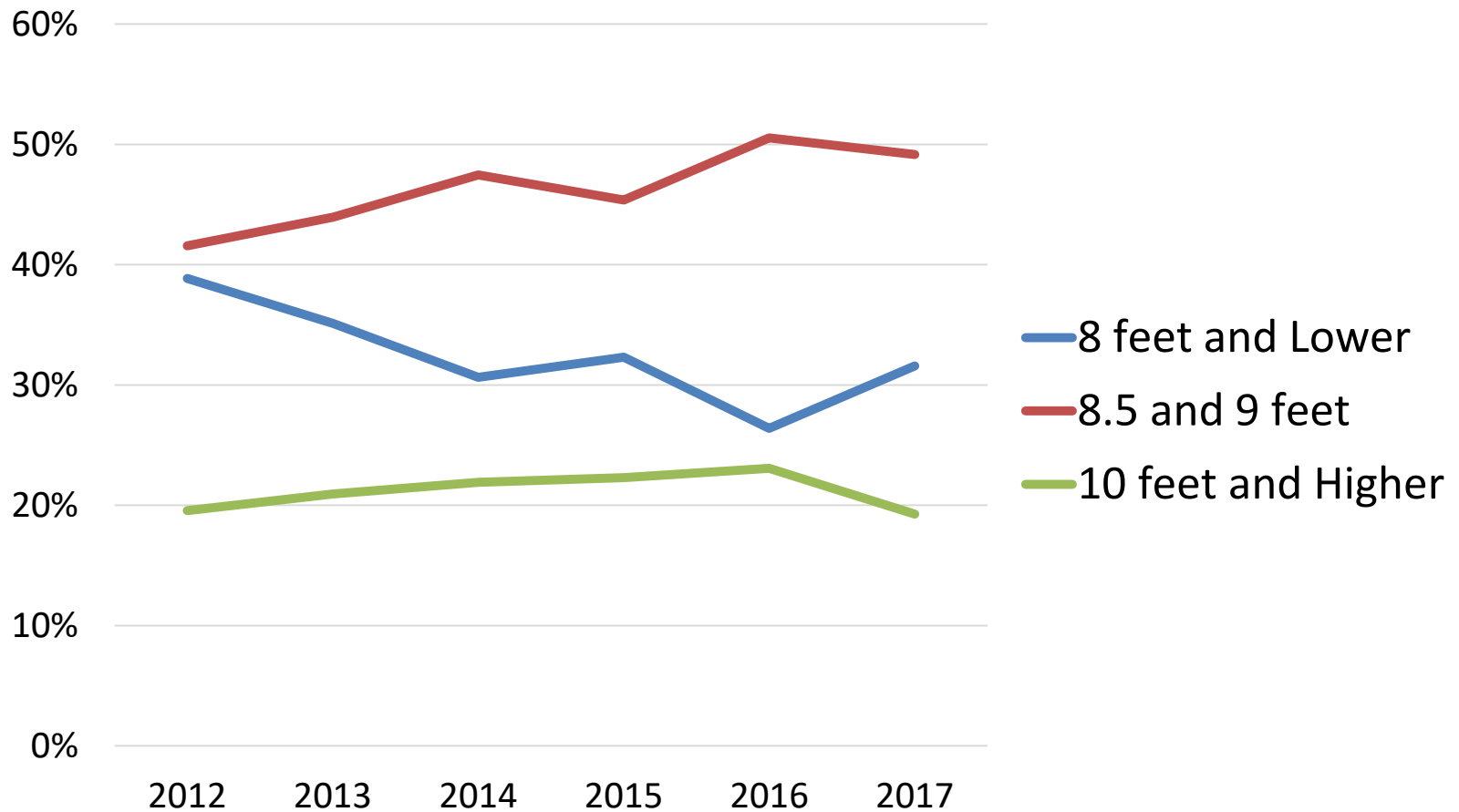
# Forecasted Growth for Housing Starts, Average Annual Growth, 2017 - 2022

	SFD Starts	MF Starts
NEW ENGLAND	2%	-1%
MID-ATLANTIC	2%	1%
EAST NORTH CENTRAL	3%	1%
WEST NORTH CENTRAL	2%	-1%
SOUTH ATLANTIC	5%	2%
EAST SOUTH CENTRAL	3%	0%
WEST SOUTH CENTRAL	4%	0%
MOUNTAIN	5%	0%
PACIFIC	5%	0%

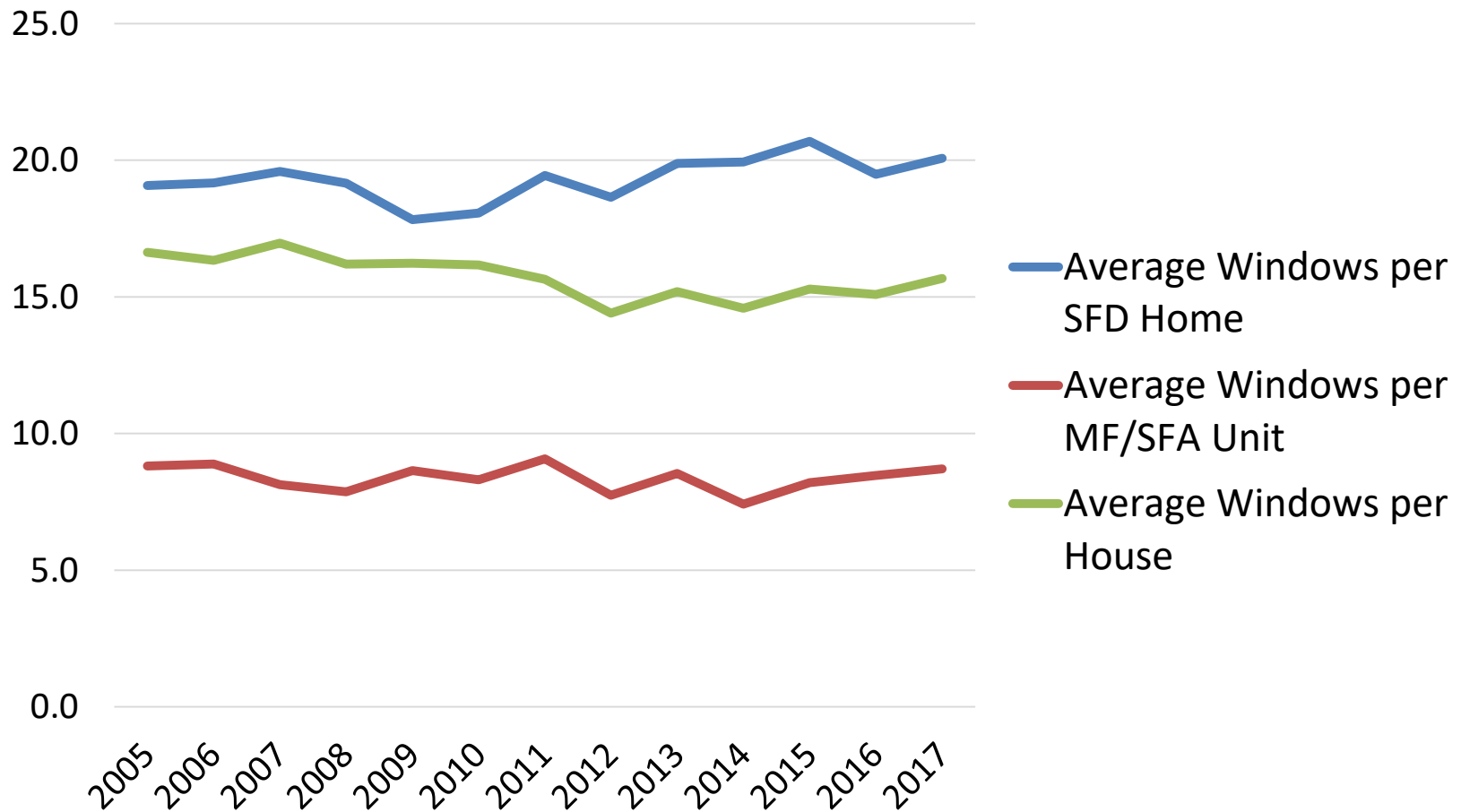
# Exterior Foam Wall Sheathing by Thickness, New SF Homes



# Wall Heights in New SF Homes

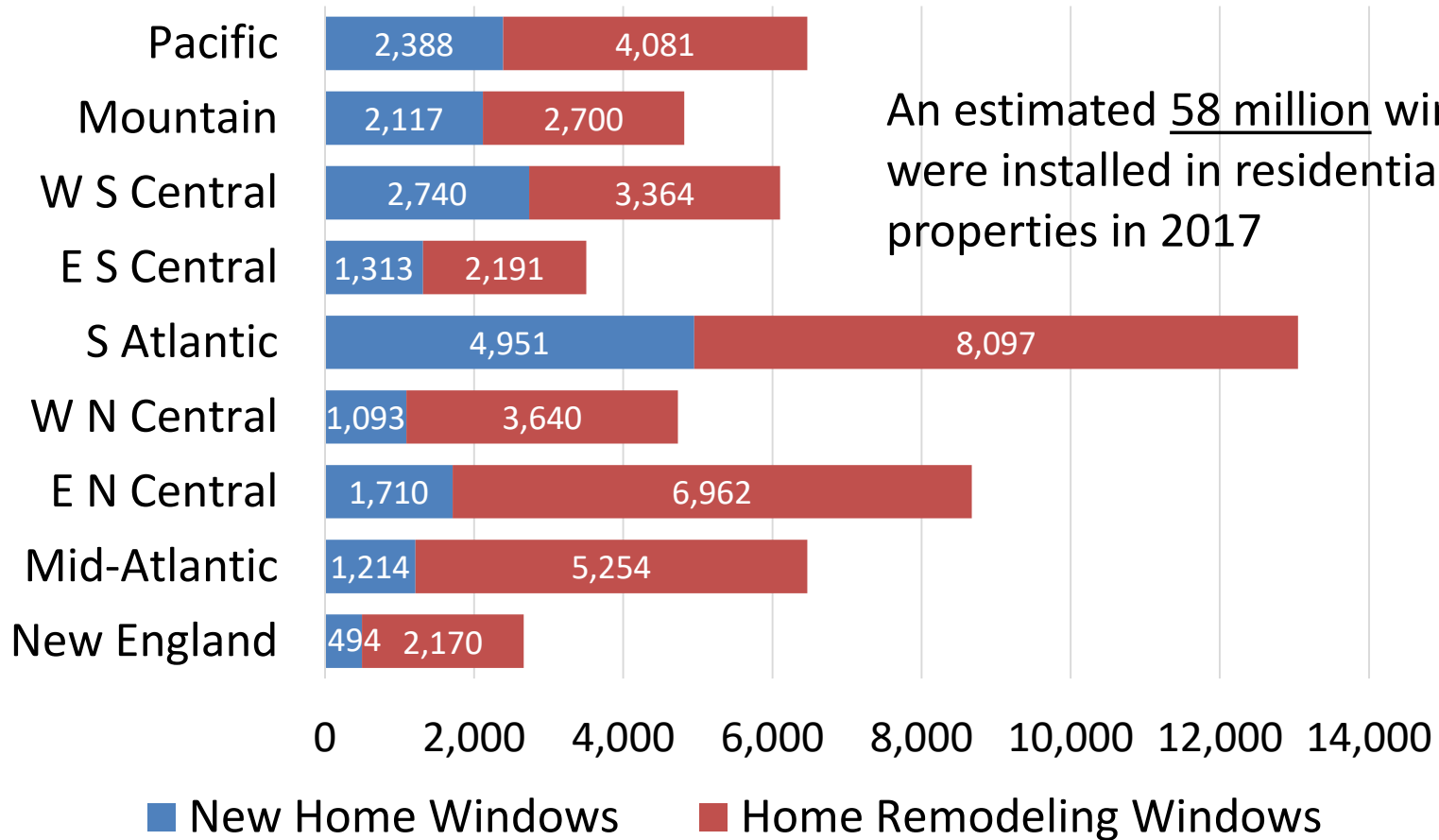


# Average Number of Windows per New Home



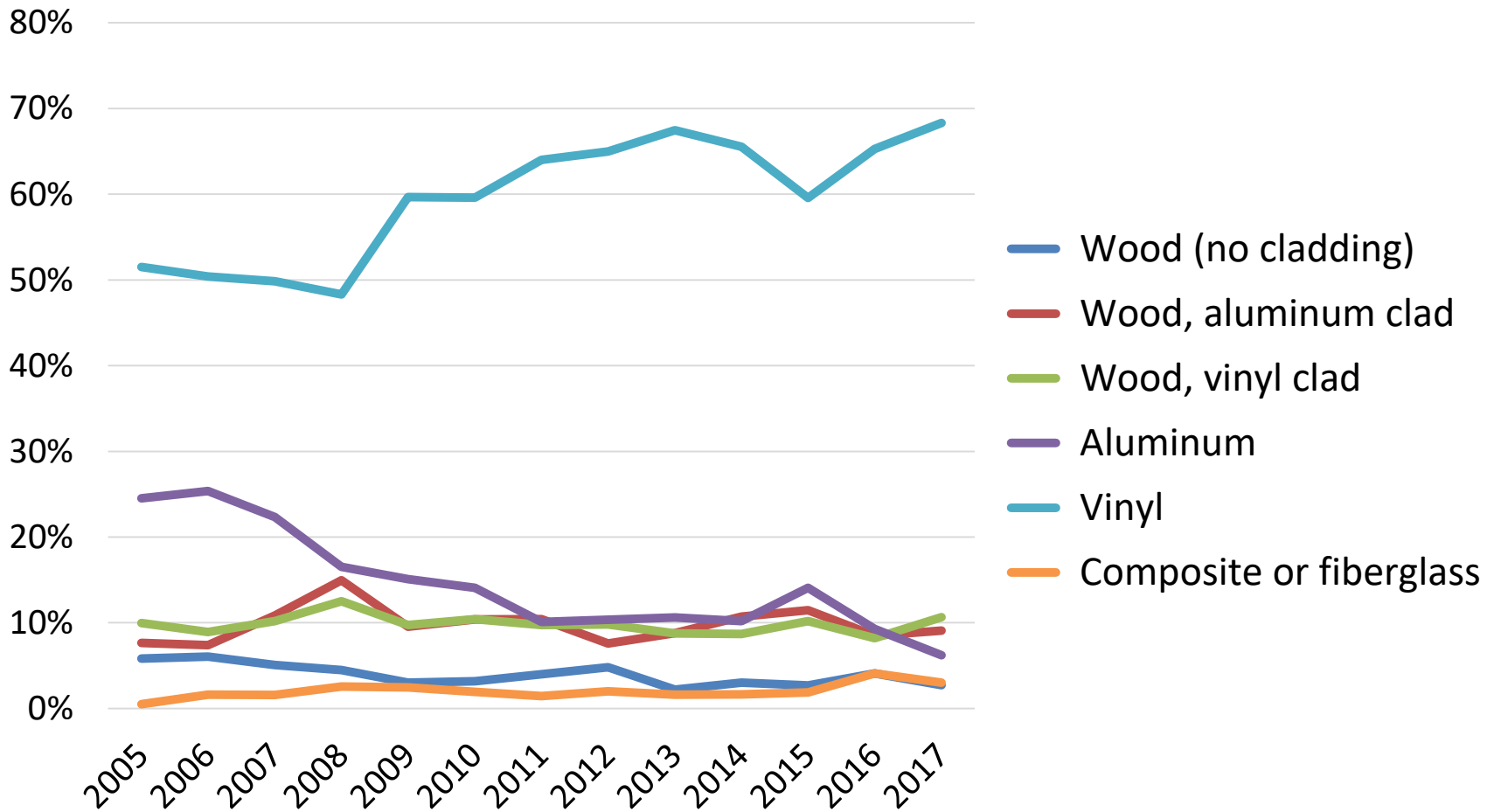


# New Home and Remodeling Window Installations, 2017 (1000's)

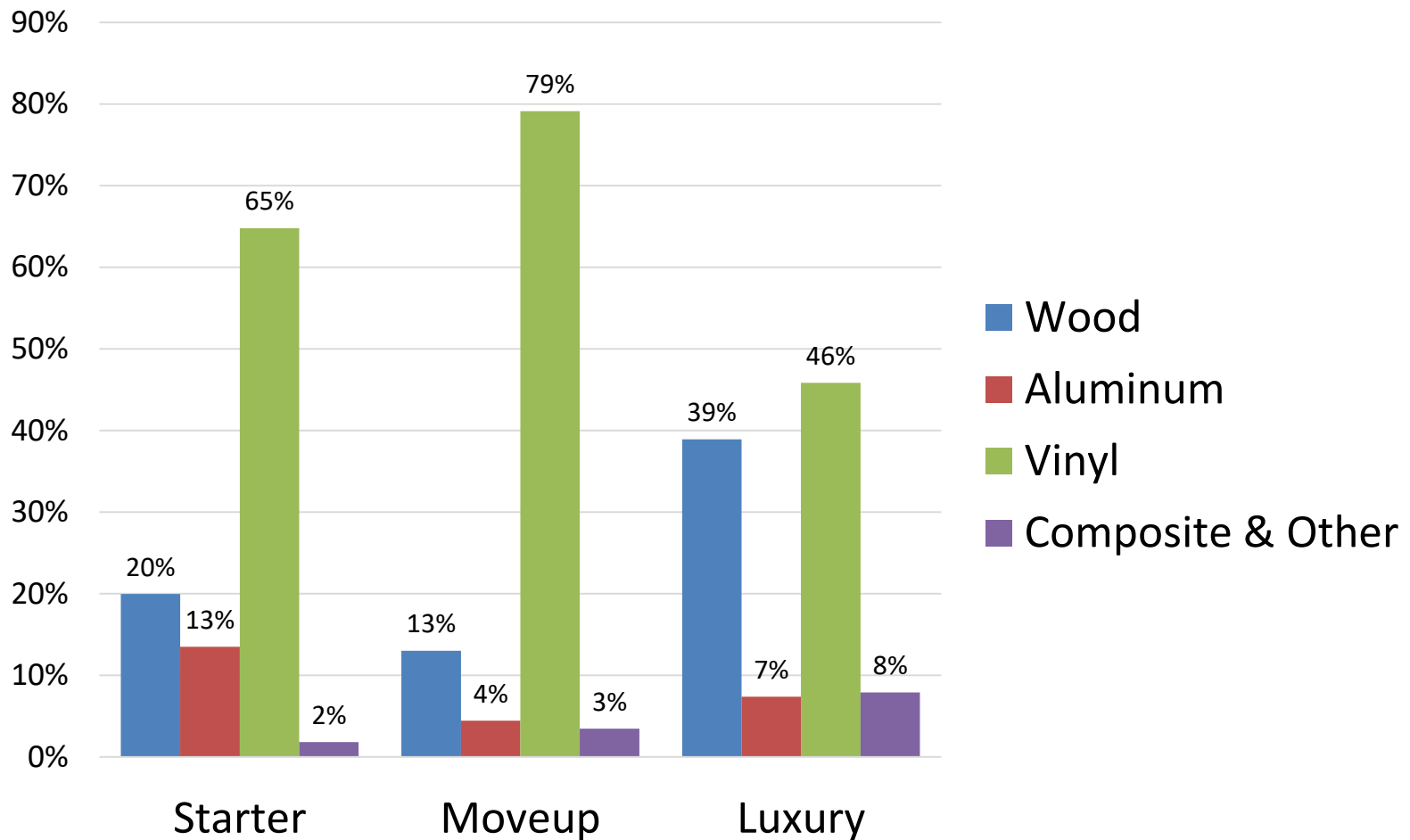


An estimated 58 million windows were installed in residential properties in 2017

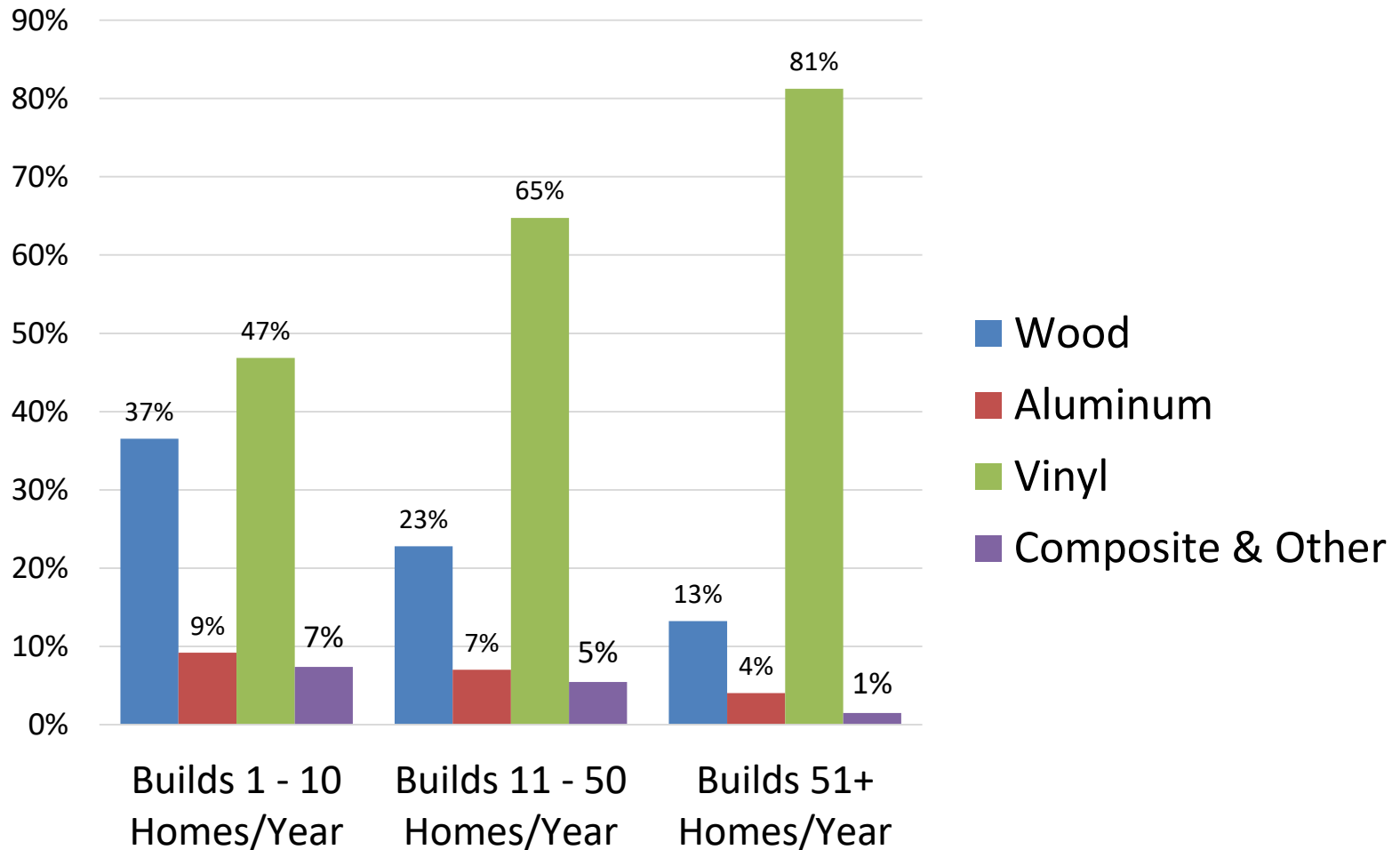
# Trend in New Home Window Frame Materials



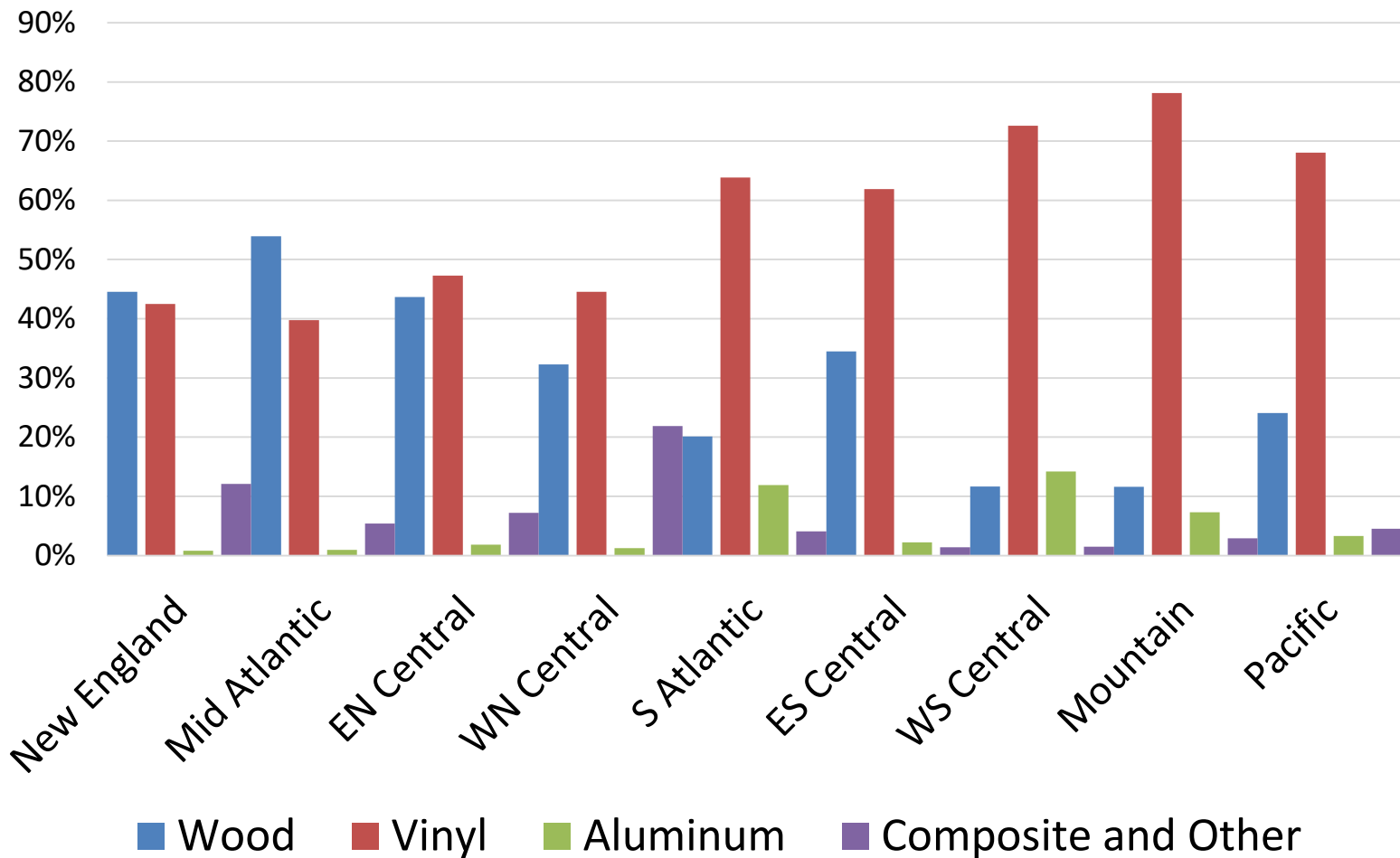
# Window Purchases by New Home Price-Point



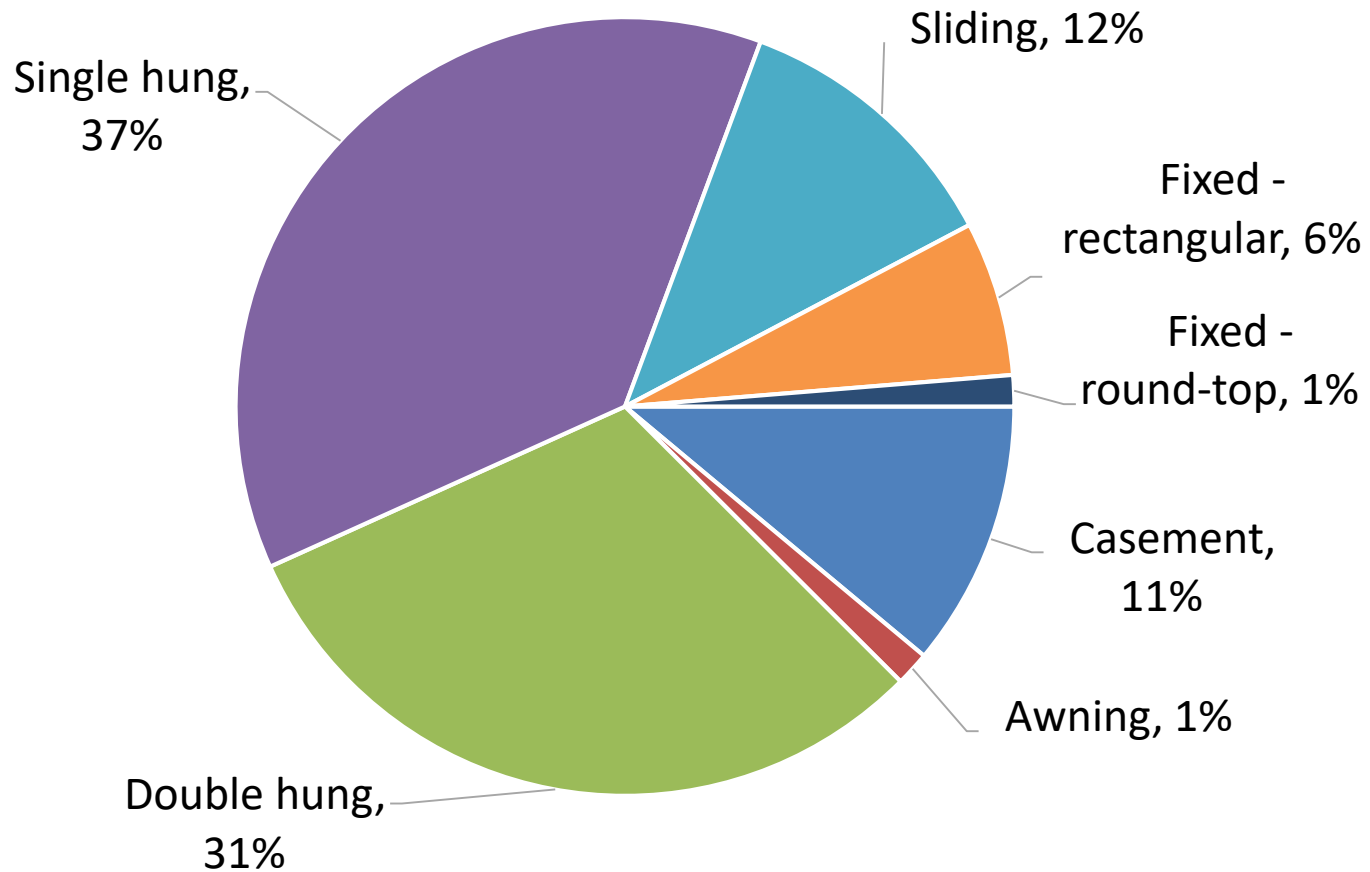
# New Home Window Purchases by Size of Home Builder



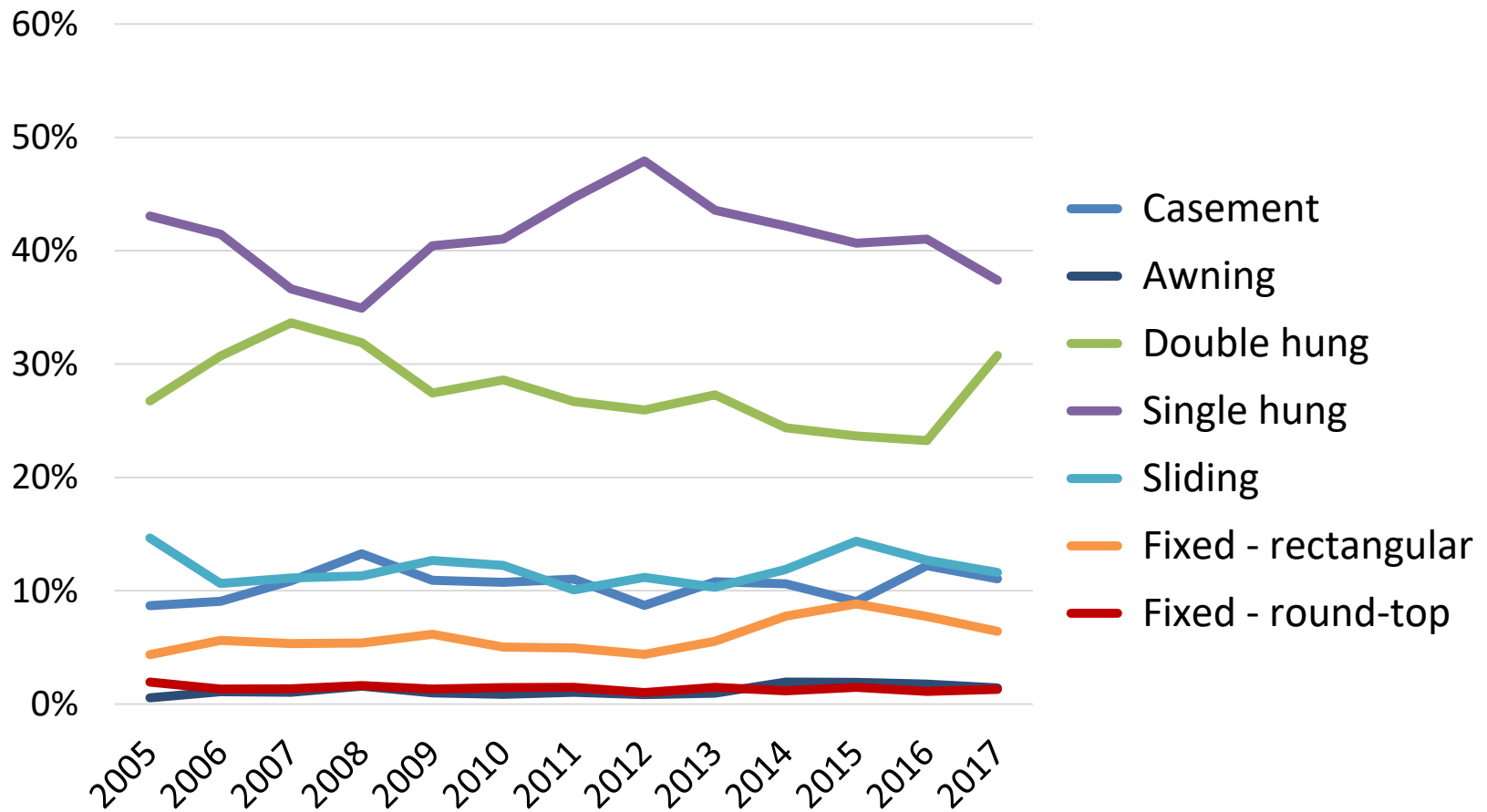
# Geographic Differences in New Home Window Purchases



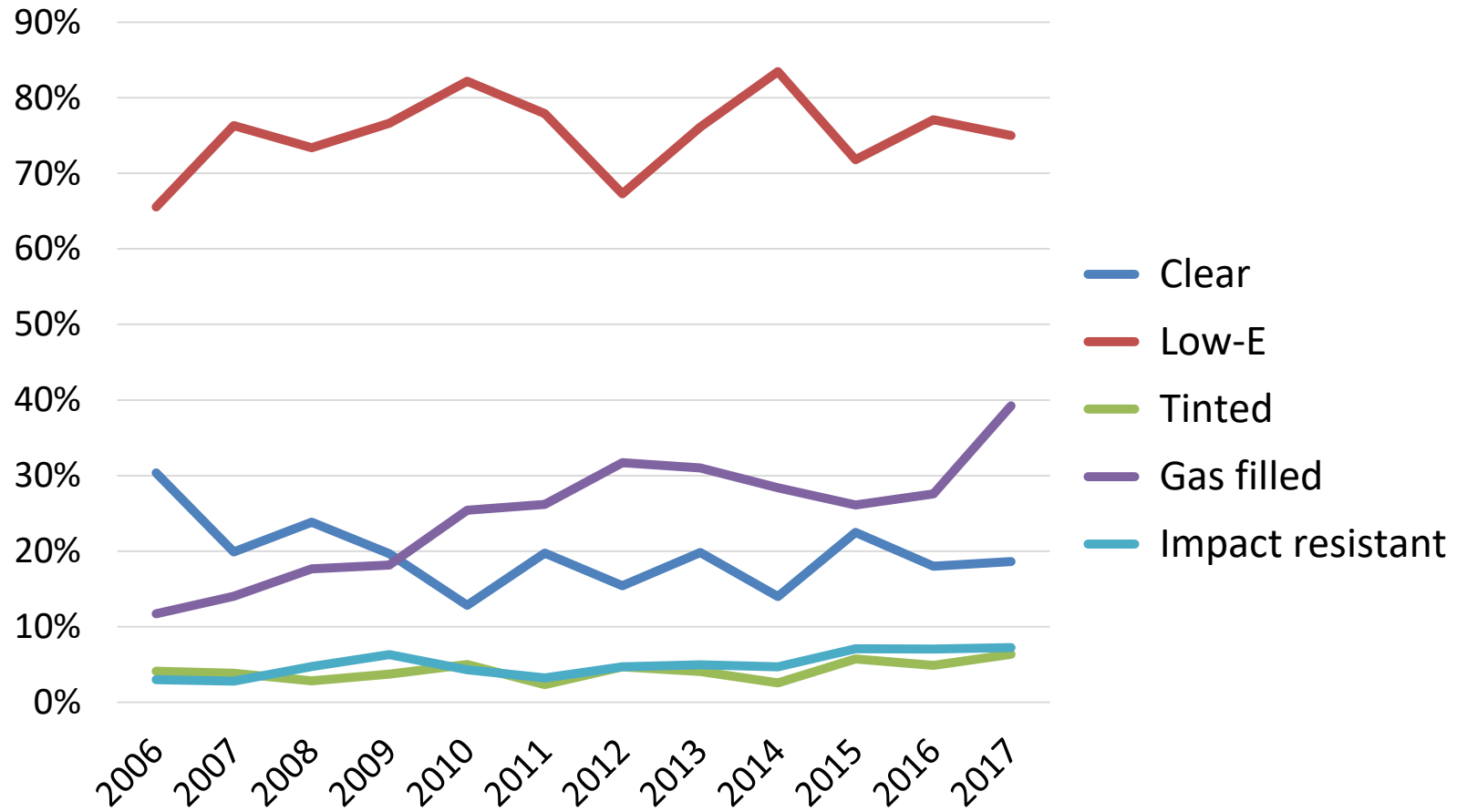
# Venting Styles in New Home Windows, 2017



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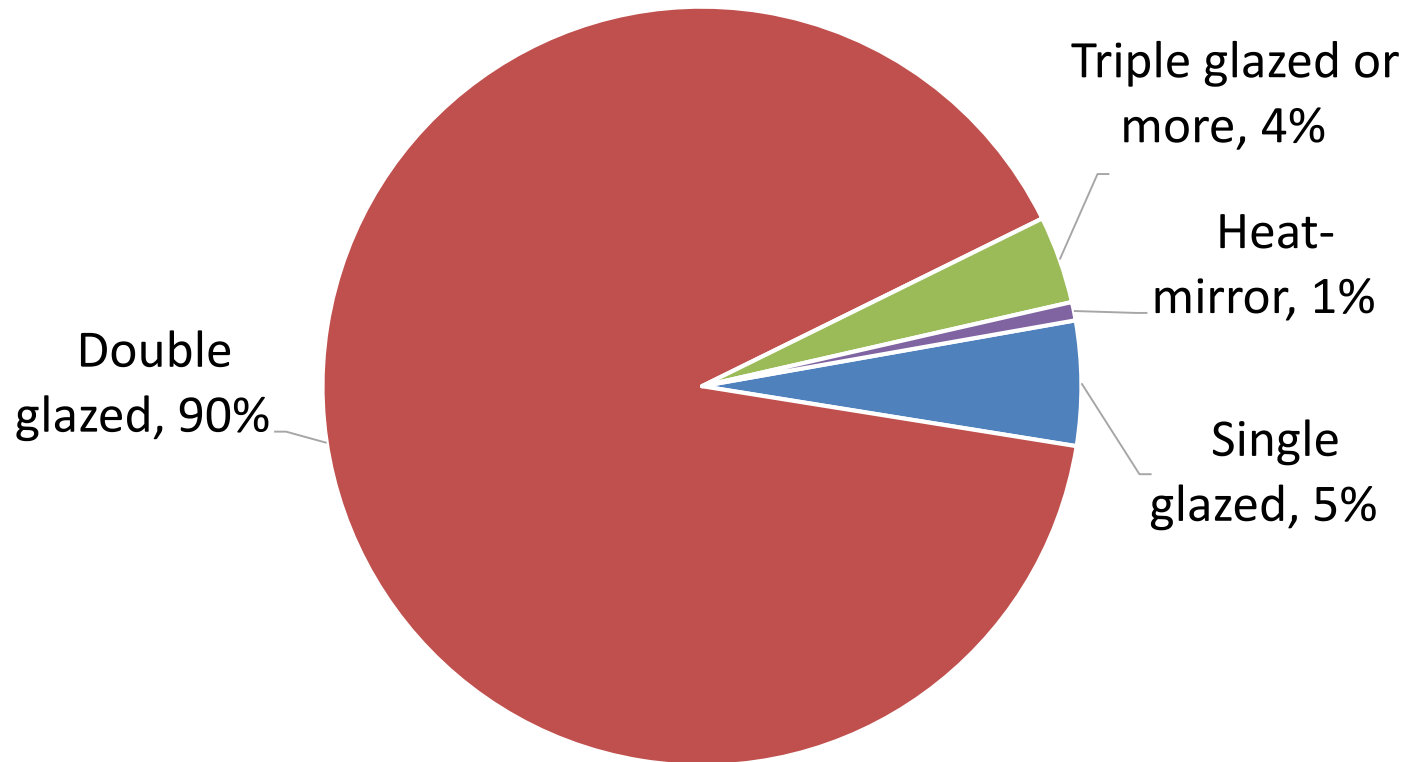


# Characteristics of Window Glazing, New Homes

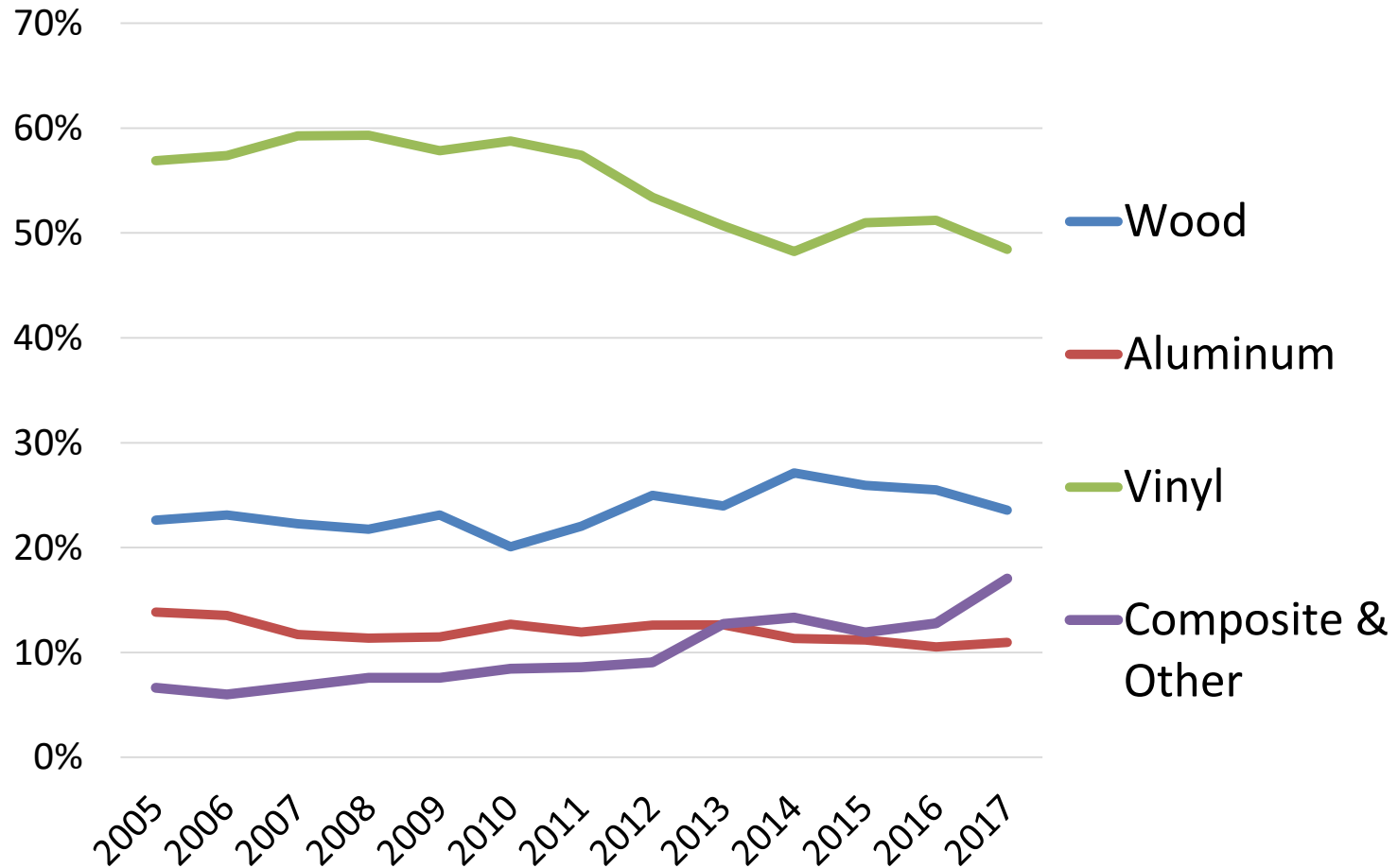




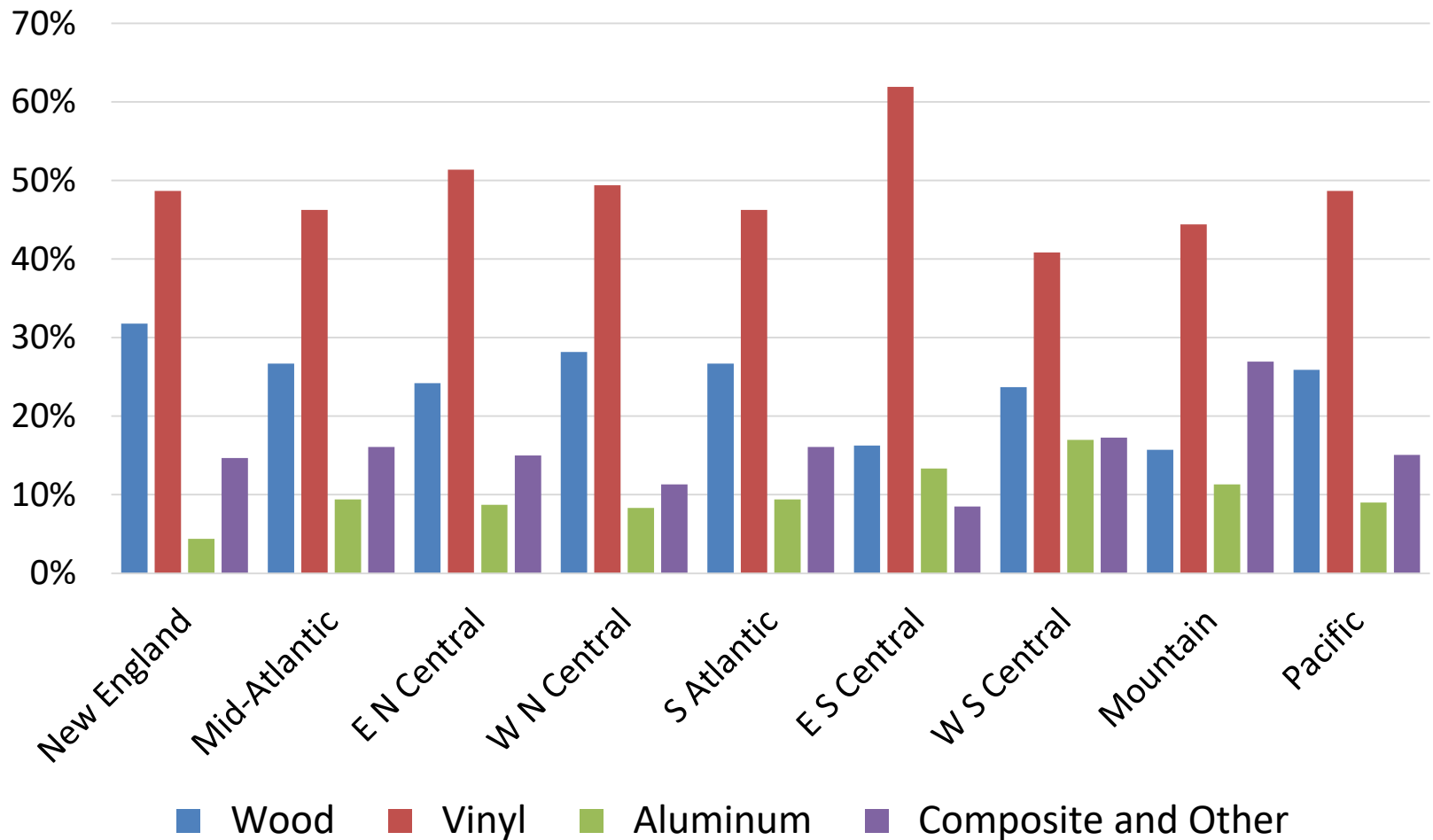
# Characteristics of Window Glazing, New Homes 2017



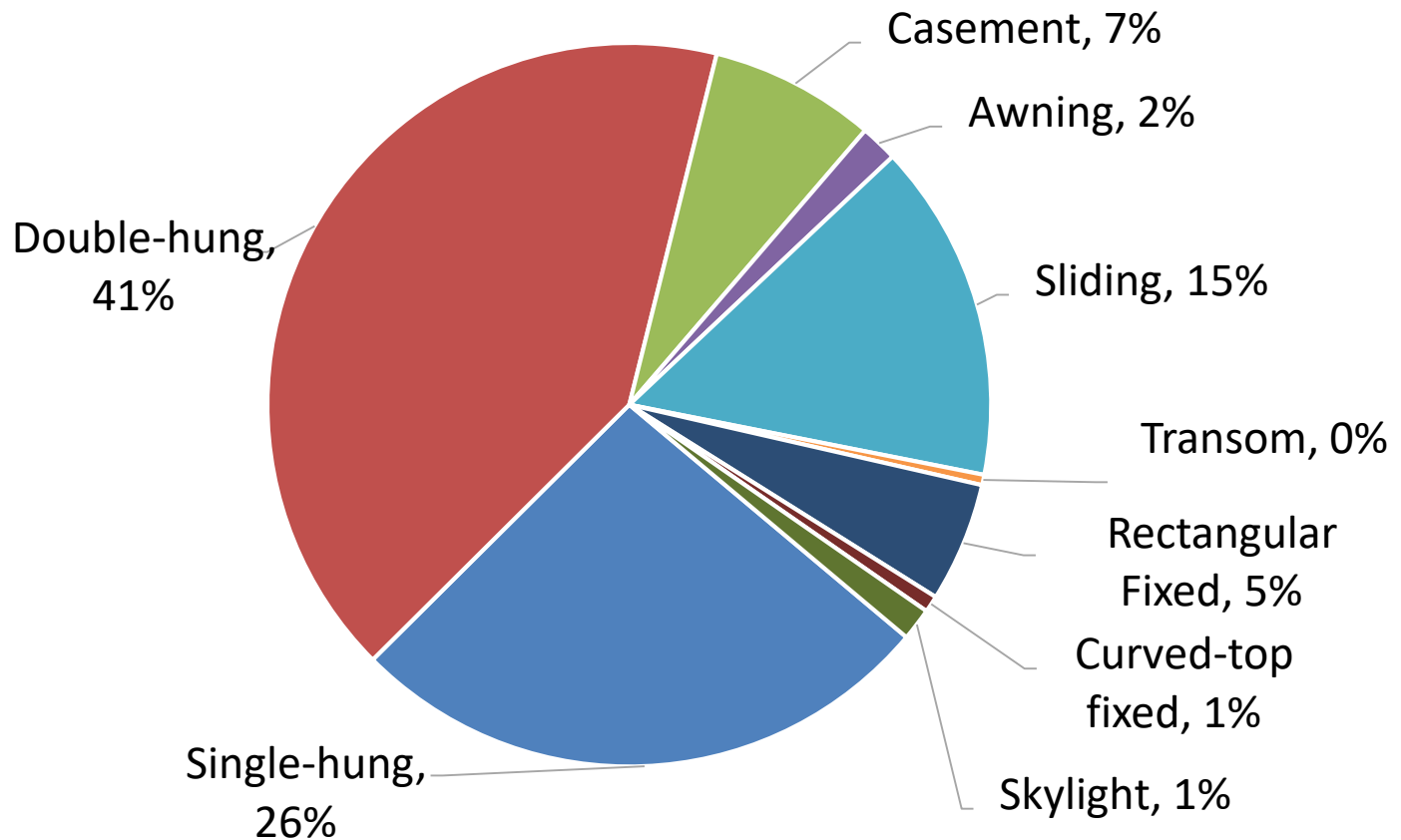
# Trends in Home Remodeling Window Frame Materials



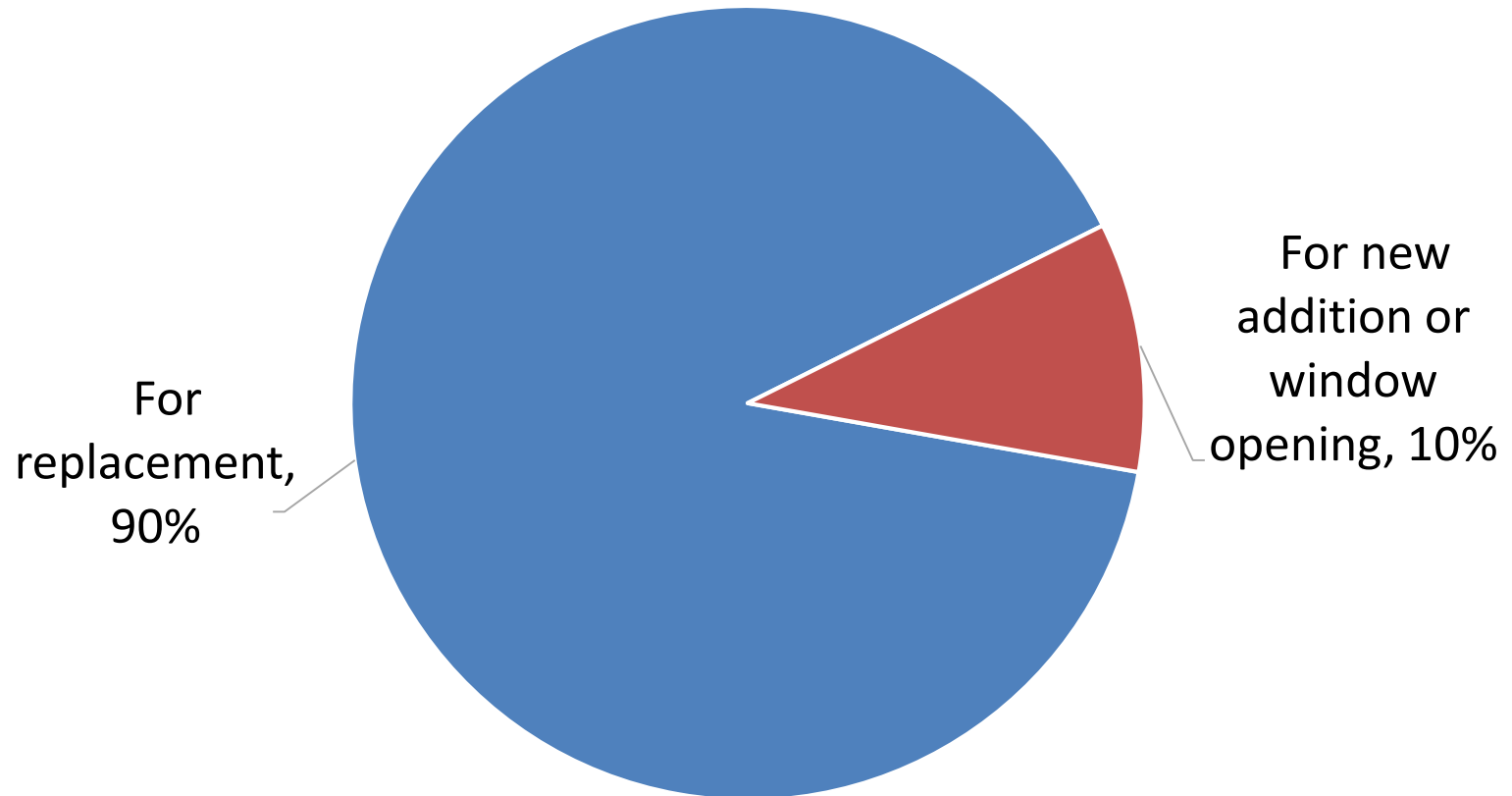
# Geographic Differences in Window Purchases for Home Remodeling, 2017



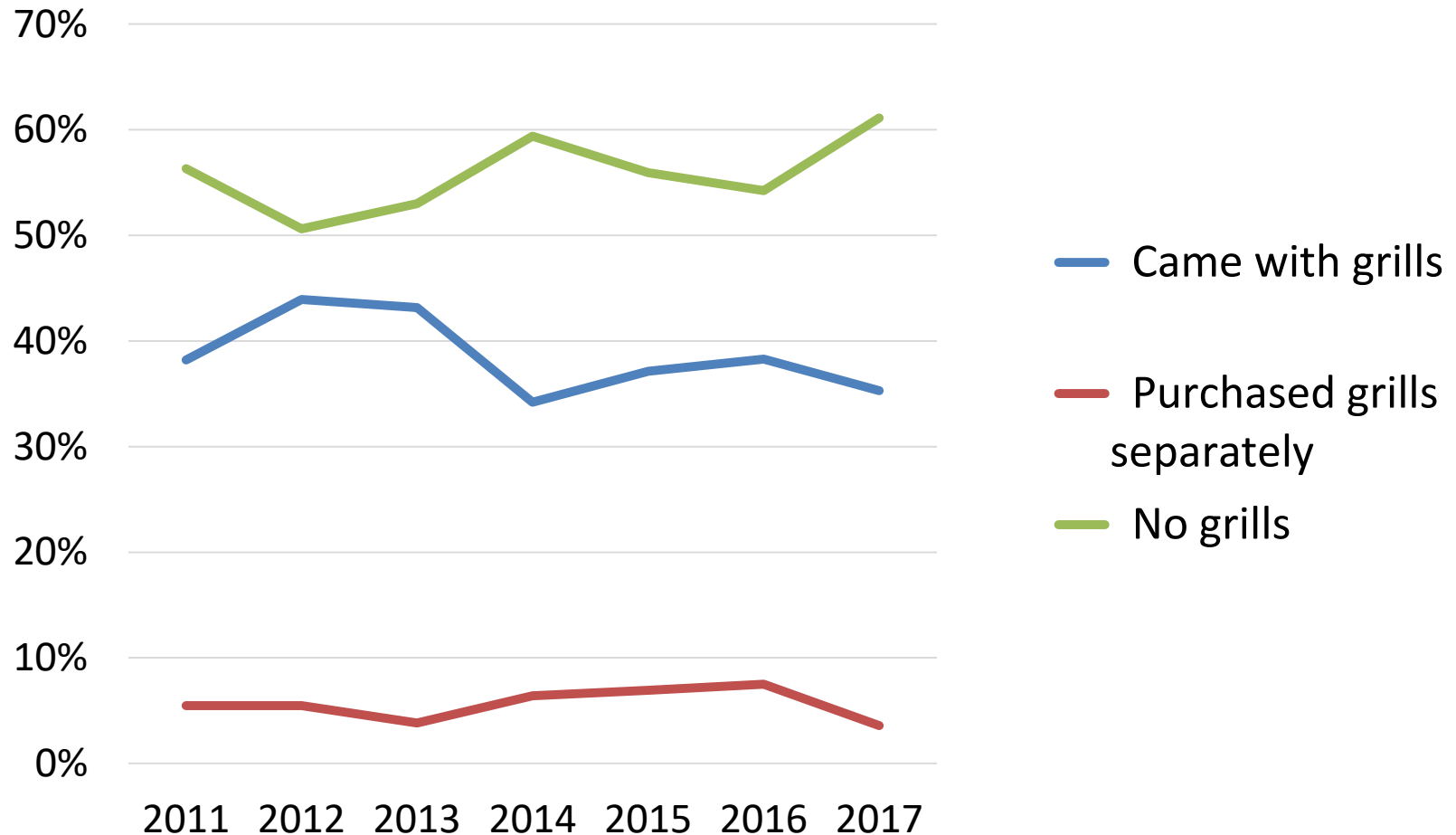
# Window Venting Styles in Home Remodeling, 2017



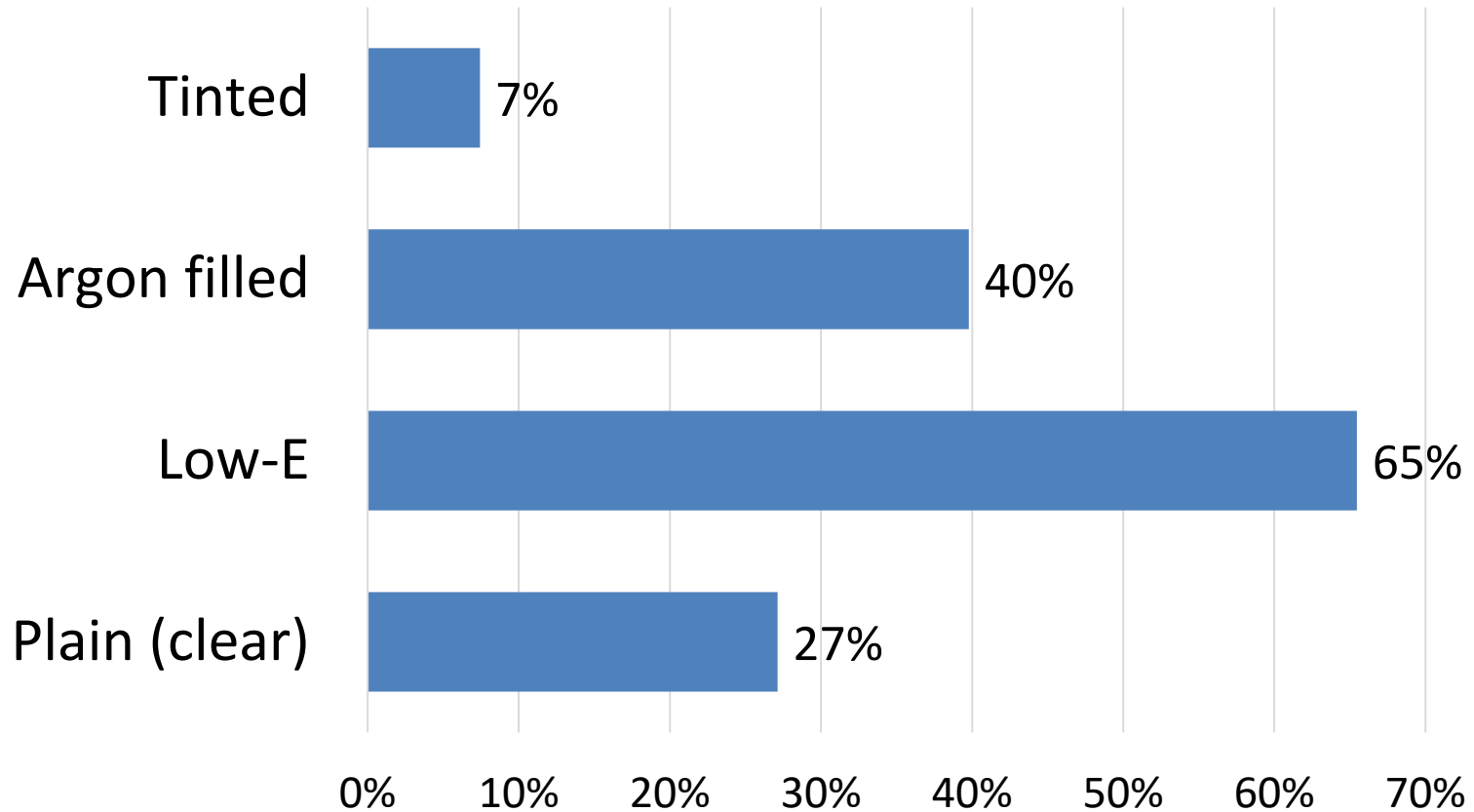
# Purpose of Window Installation in Home Remodeling, 2017



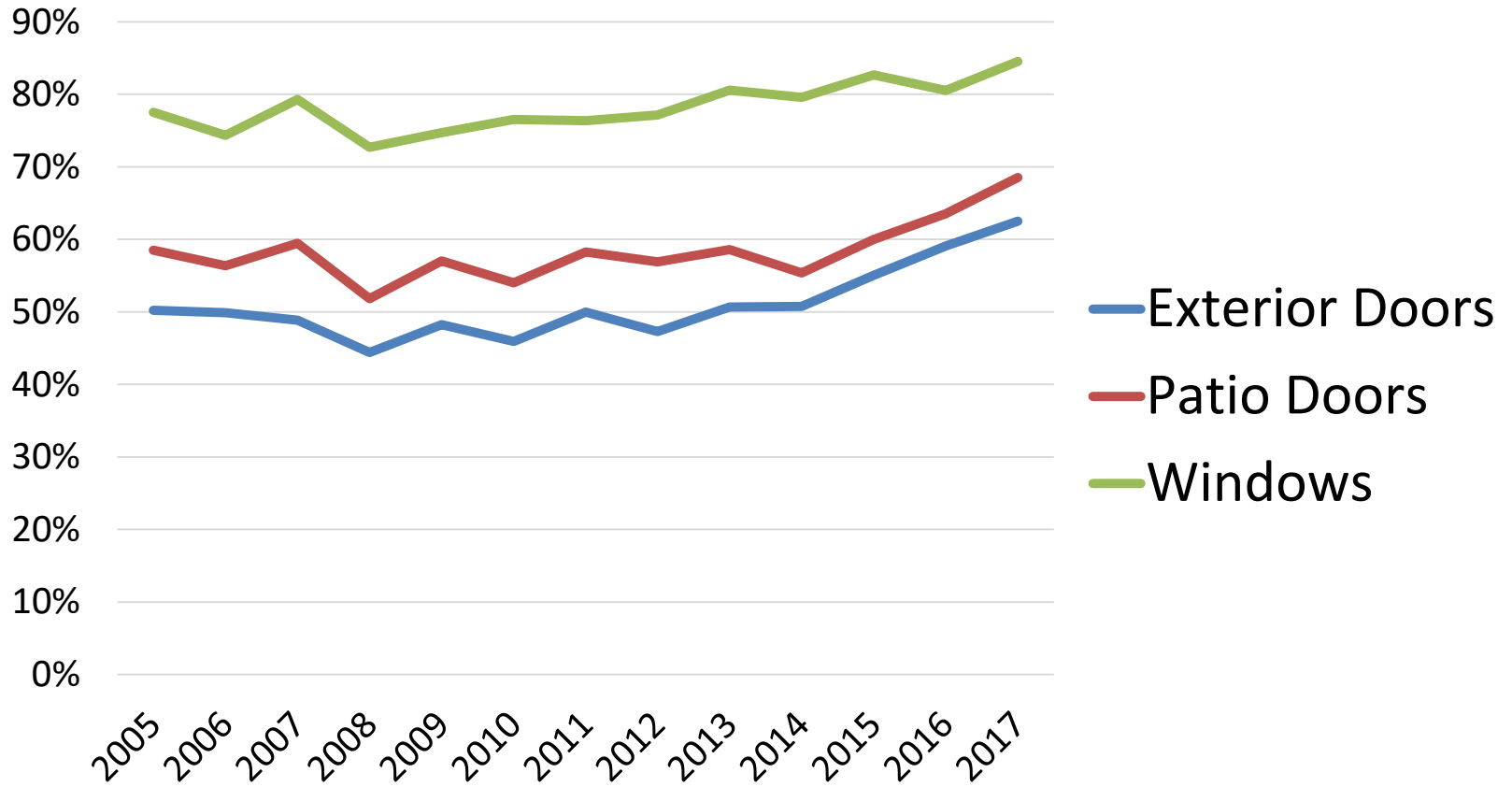
# Grills on Home Remodeling Windows



# Characteristics of Window Glazing in Home Remodeling, 2017

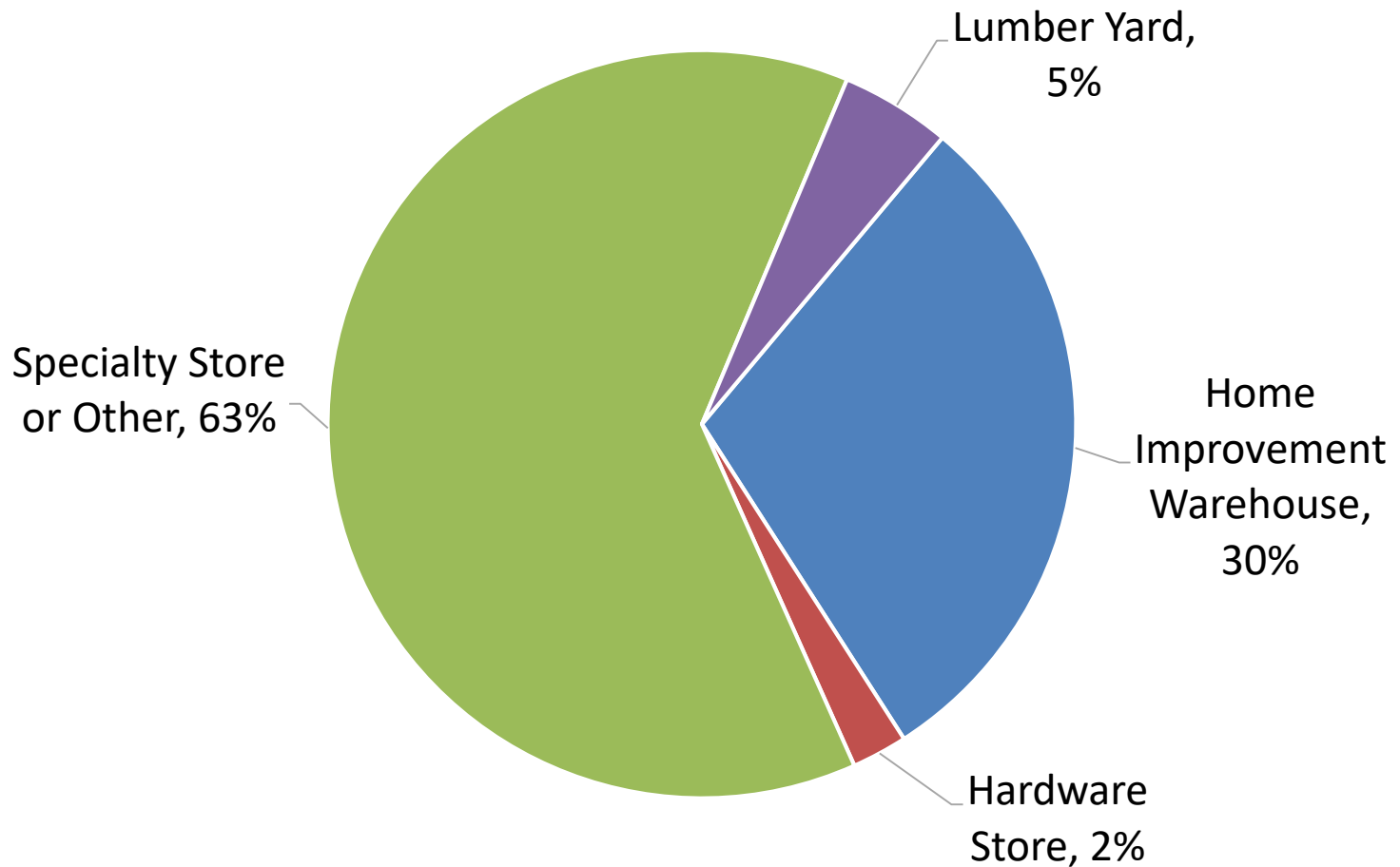


# Share of Pro Installations in Home Remodeling – Fenestration

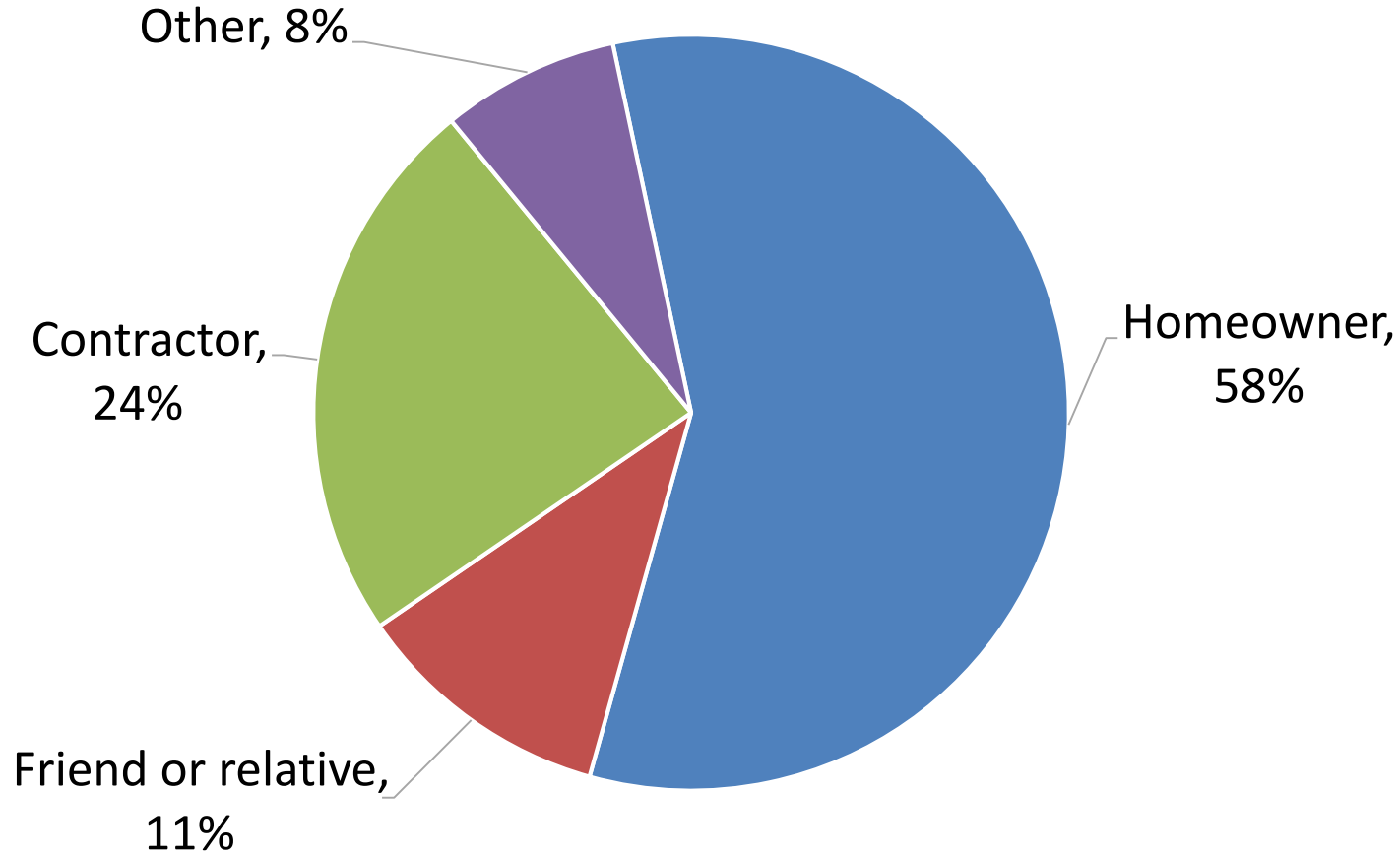




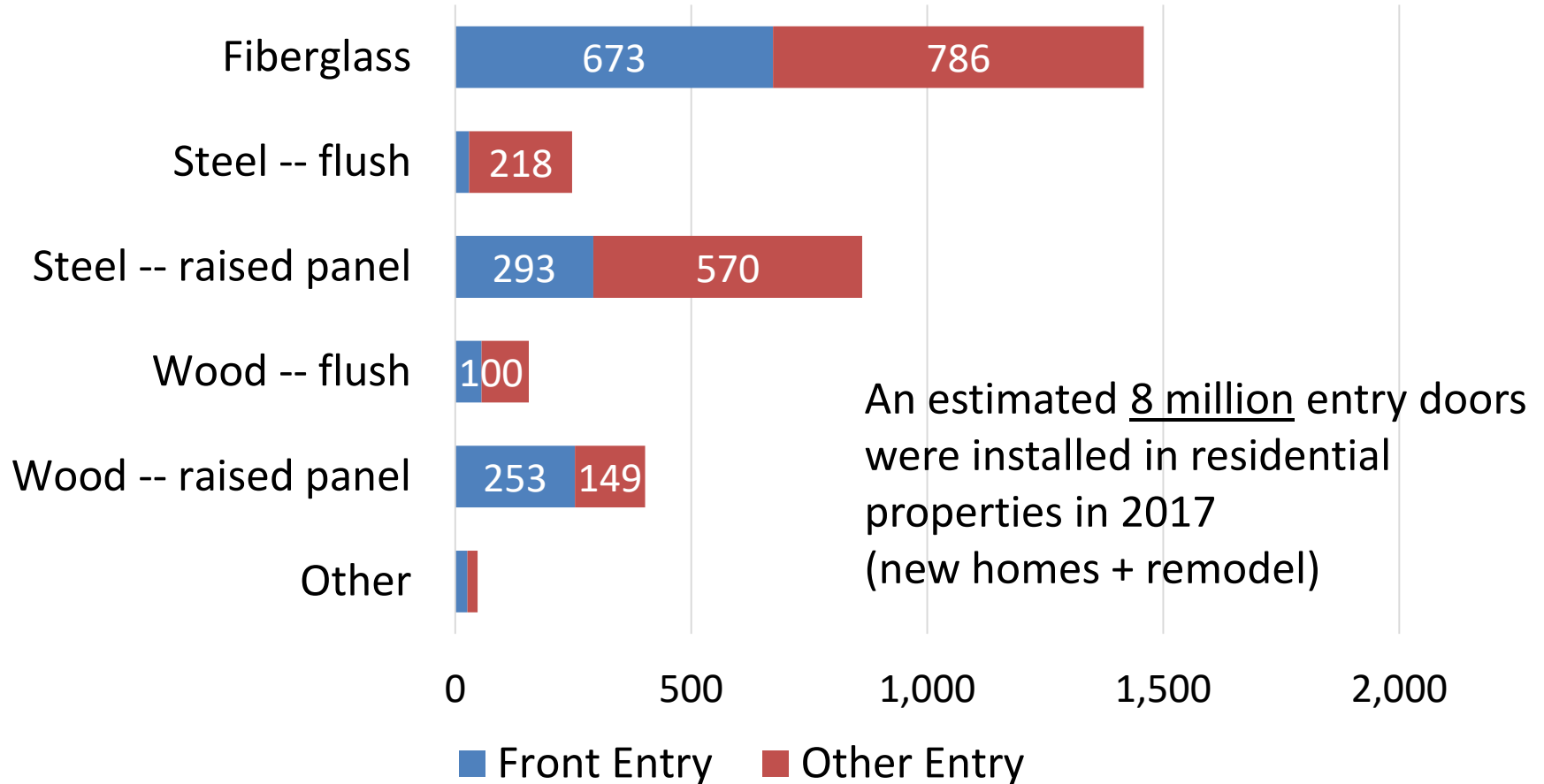
# Window Place of Purchase in Home Remodeling Windows, 2017



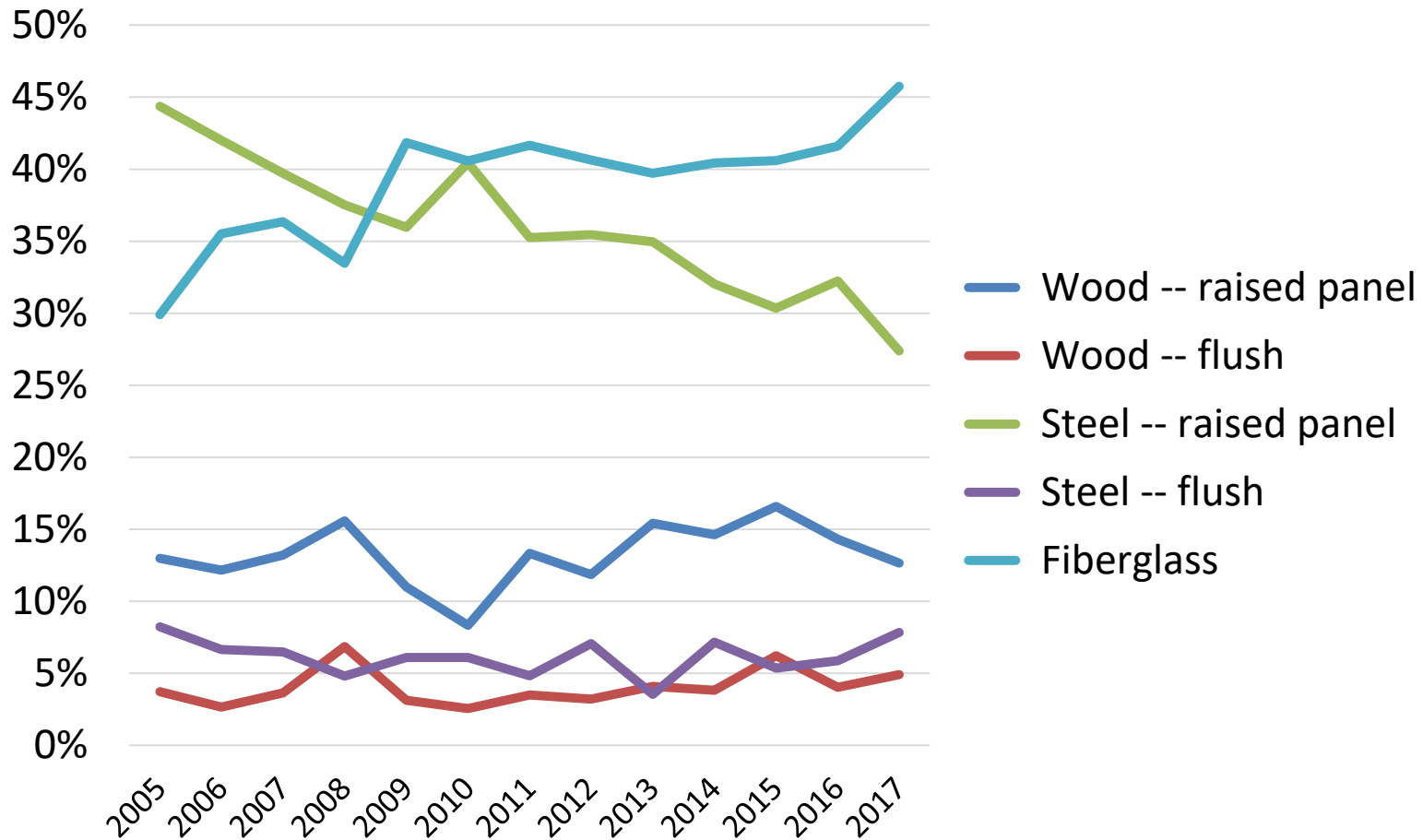
# Brand Decision for Windows in Home Remodeling, 2017



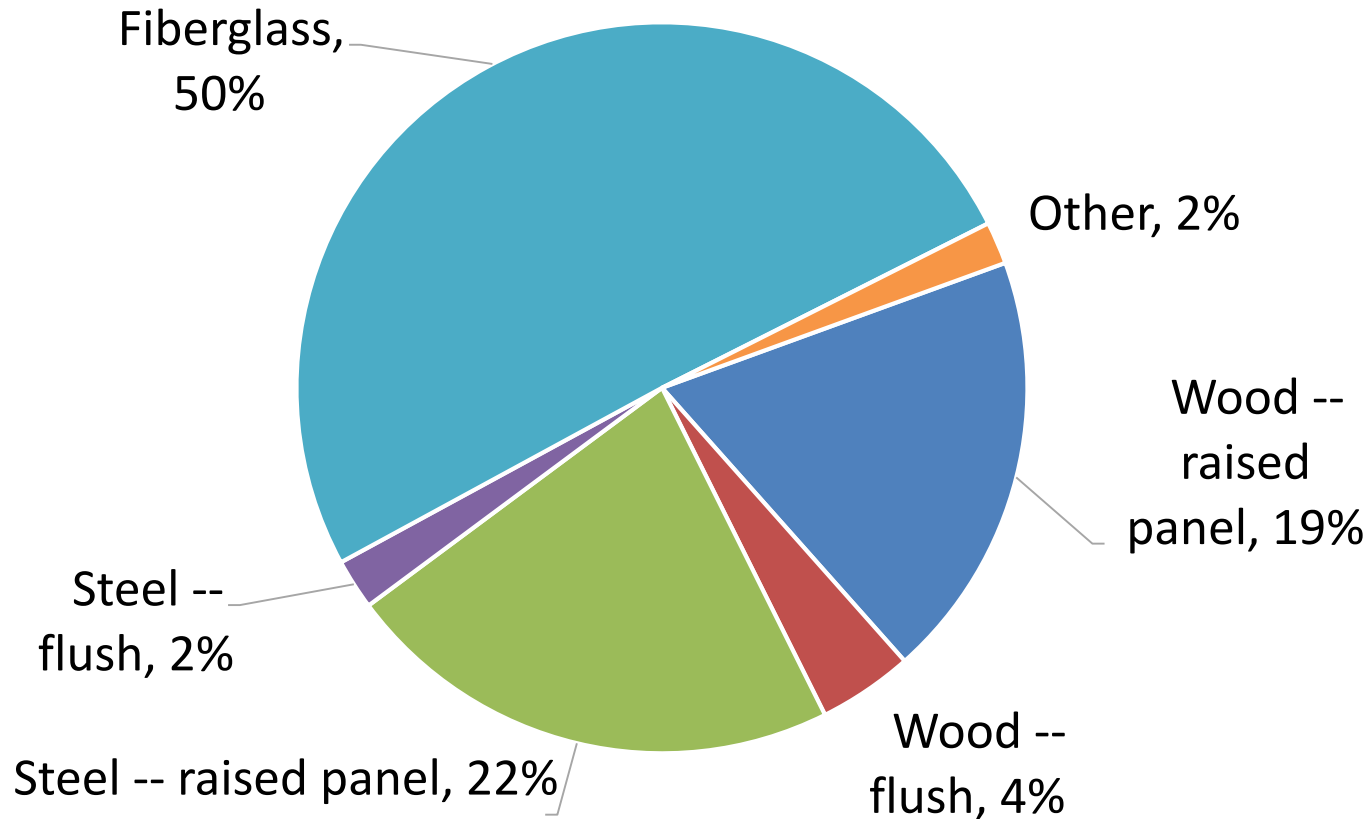
# Exterior Door Purchases in New Homes, 2017 (thousands)



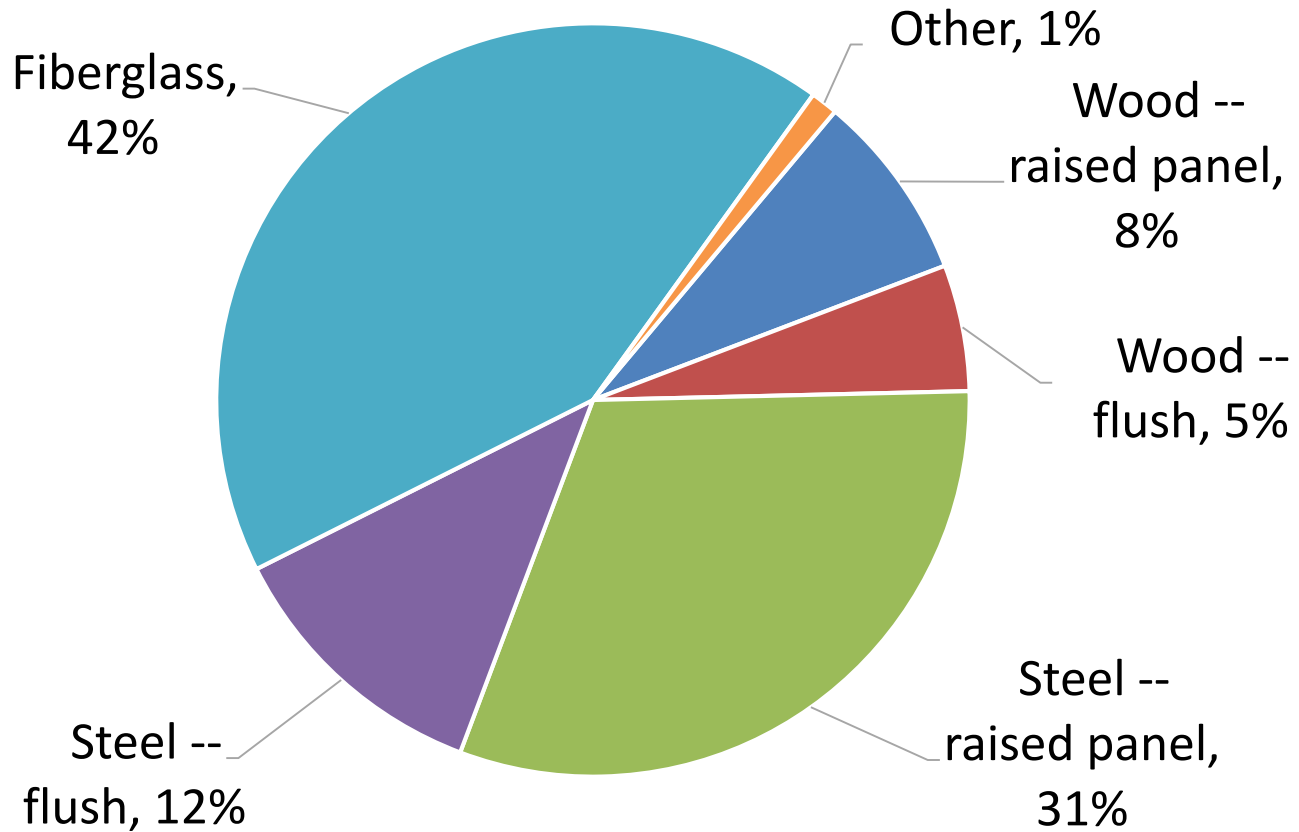
# Exterior Entry Door Purchase Trends, New Homes



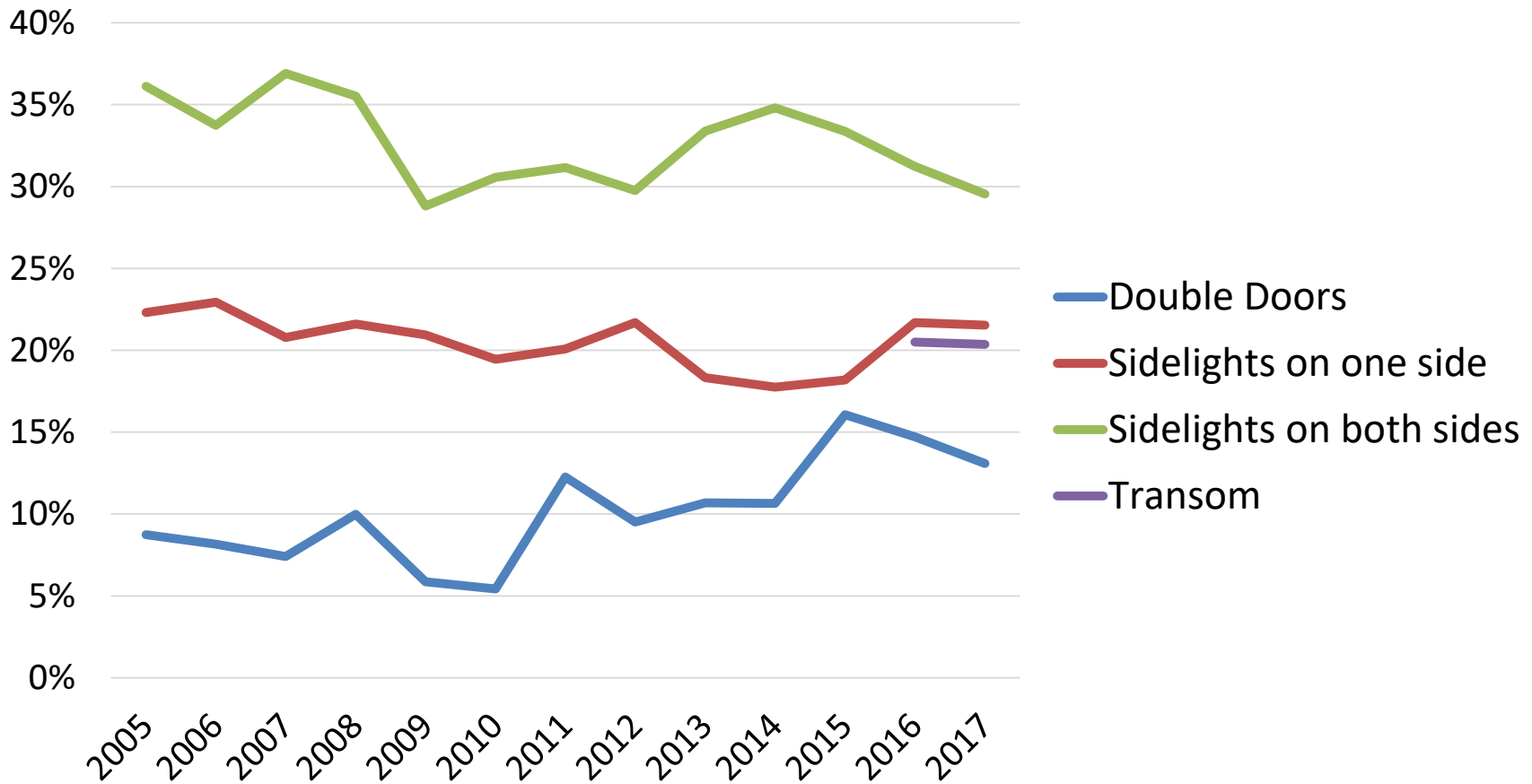
# Front Entry Doors, New U.S. Homes 2017



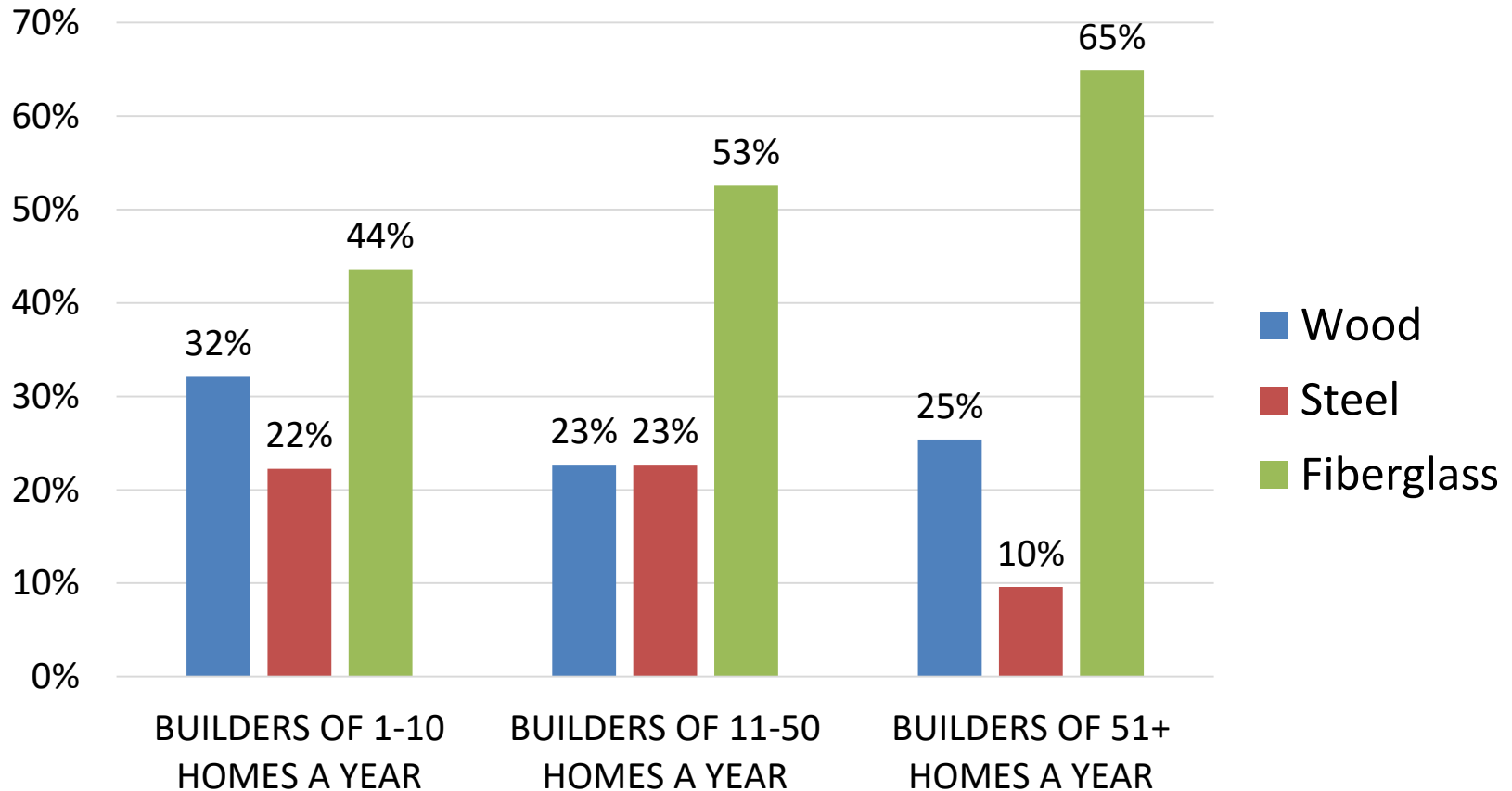
# Other Entry Doors, New U.S. Homes 2017



# Features of Front Entry Doors, New Single Family Homes

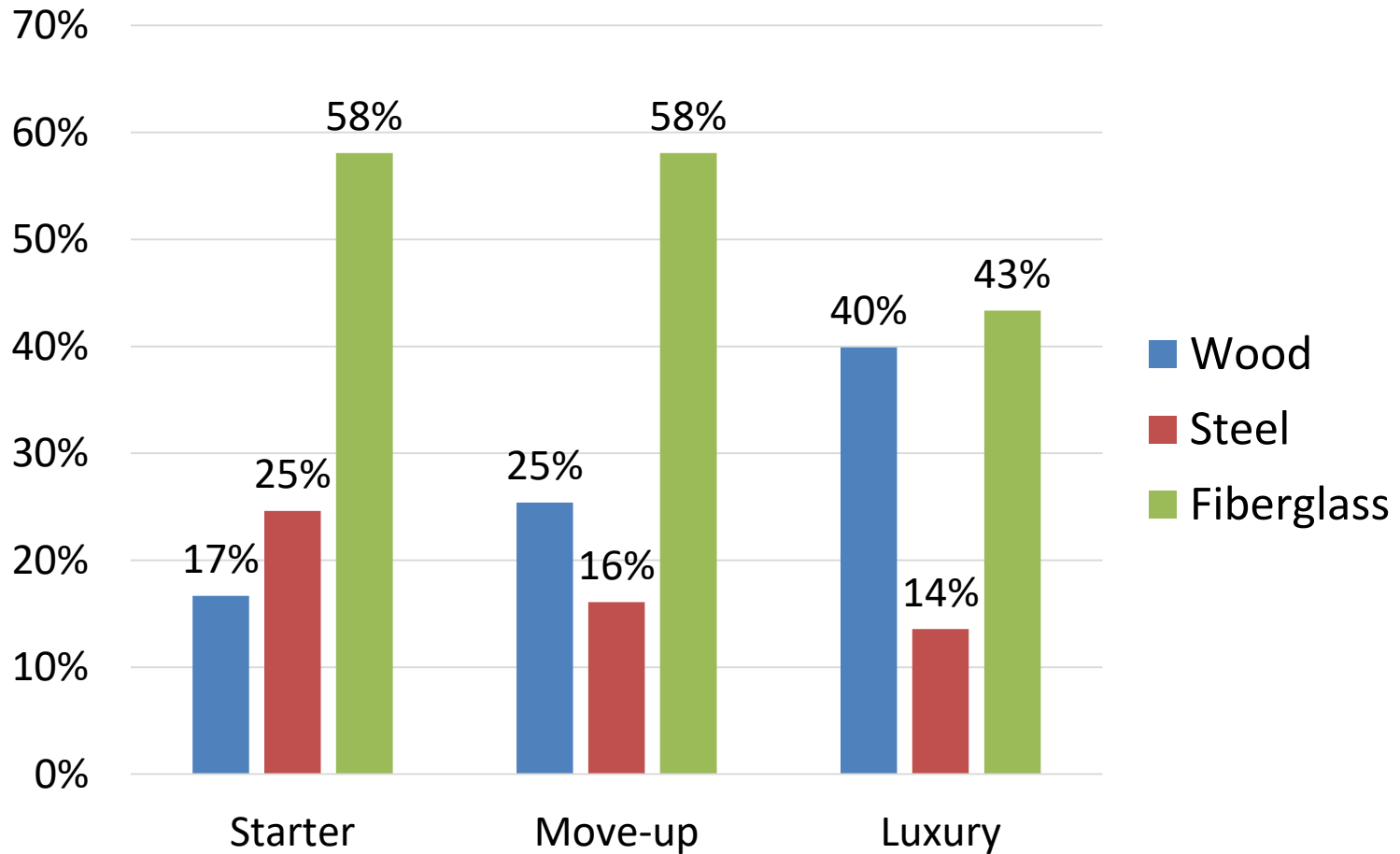


# Front Entry Doors by Builder Size, New Single Family Homes 2017

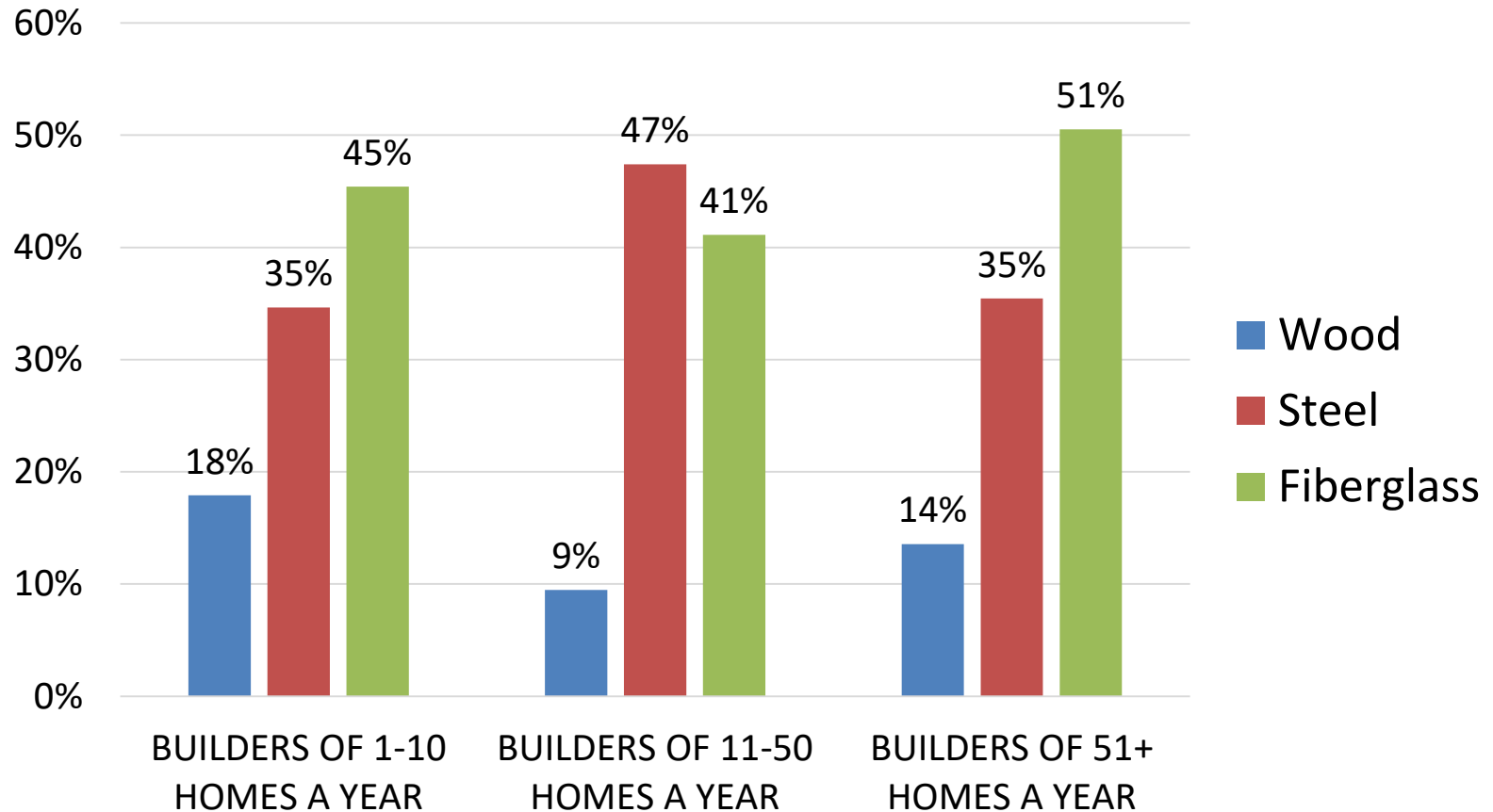




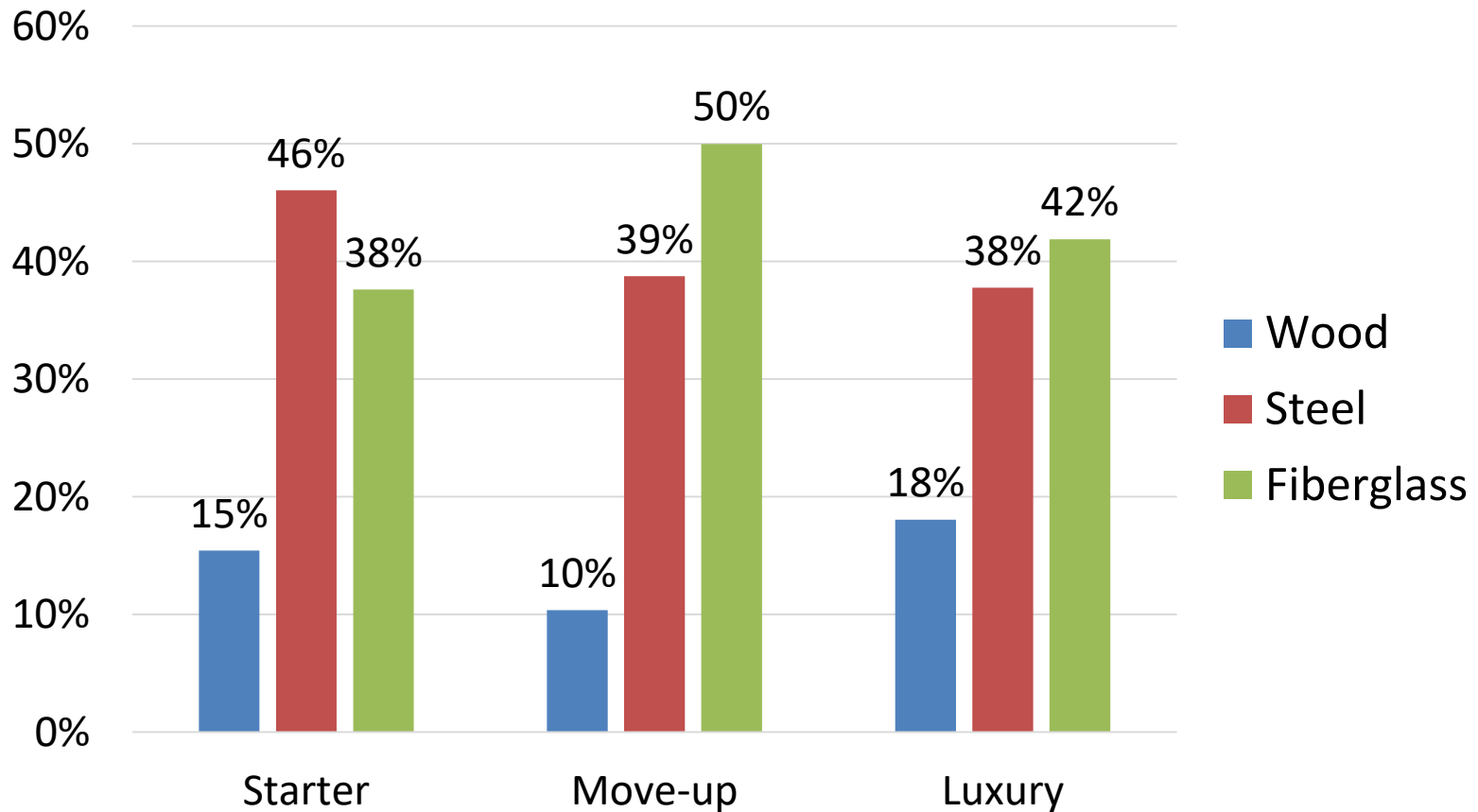
# Front Entry Doors by Price-Point of New Single-Family Home 2017



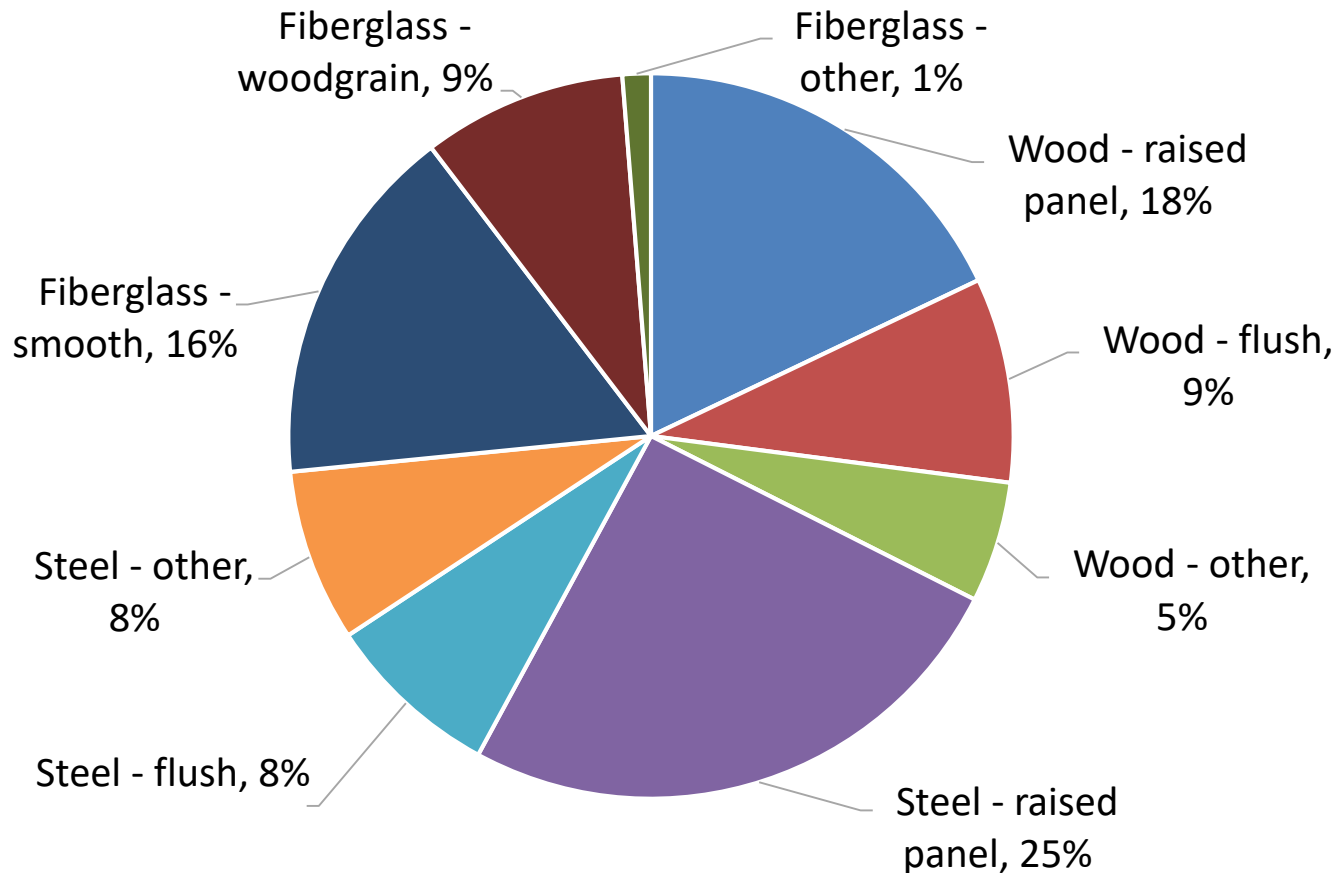
# Other Entry Doors by Builder Size, New Single-Family Homes 2017



# Other Entry Doors by Price-Point of New Single-Family Home 2017



# Exterior Doors in U.S. Home Remodeling, 2017

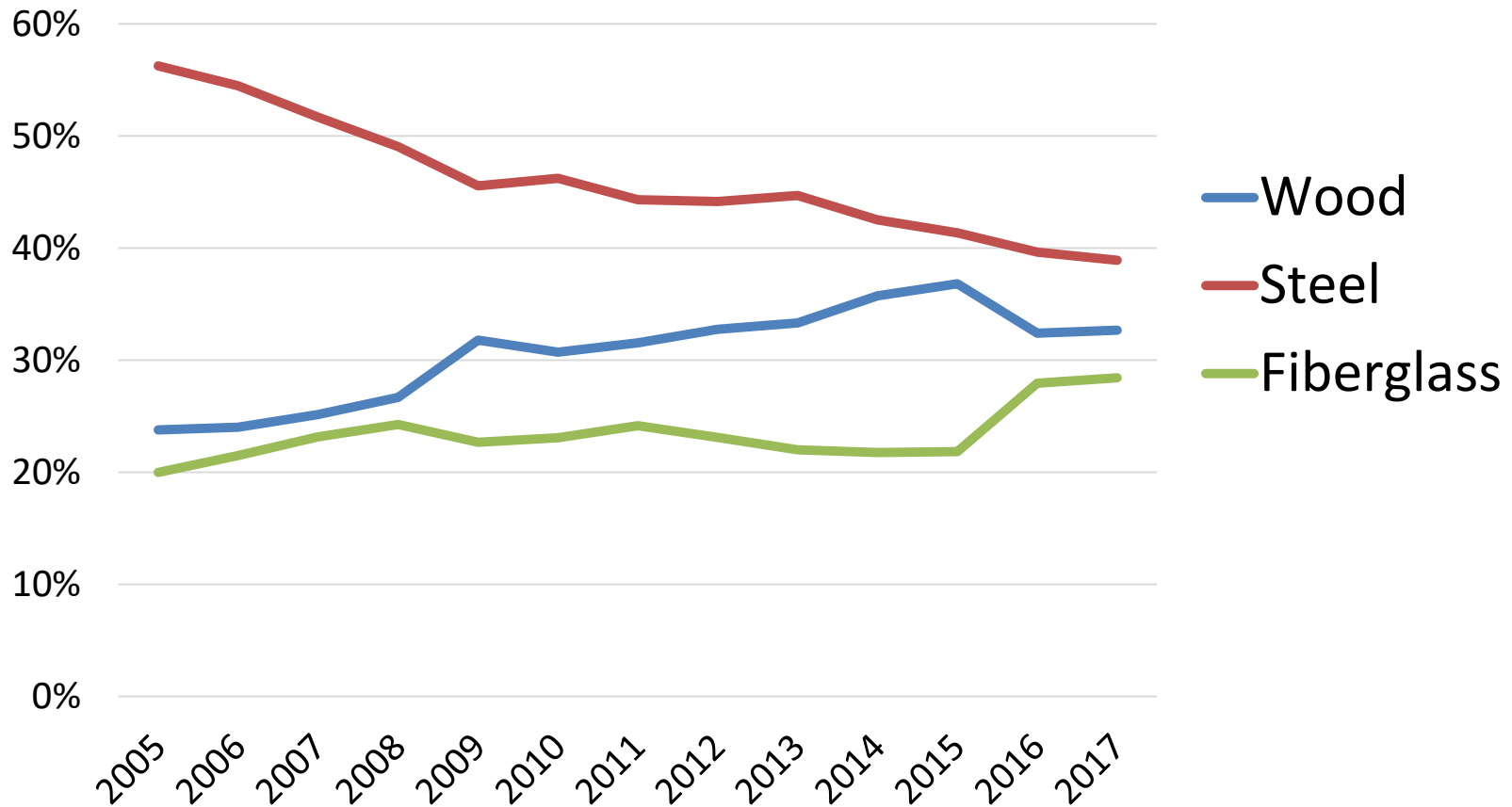


Raised panel and woodgrain more popular on Front Entry

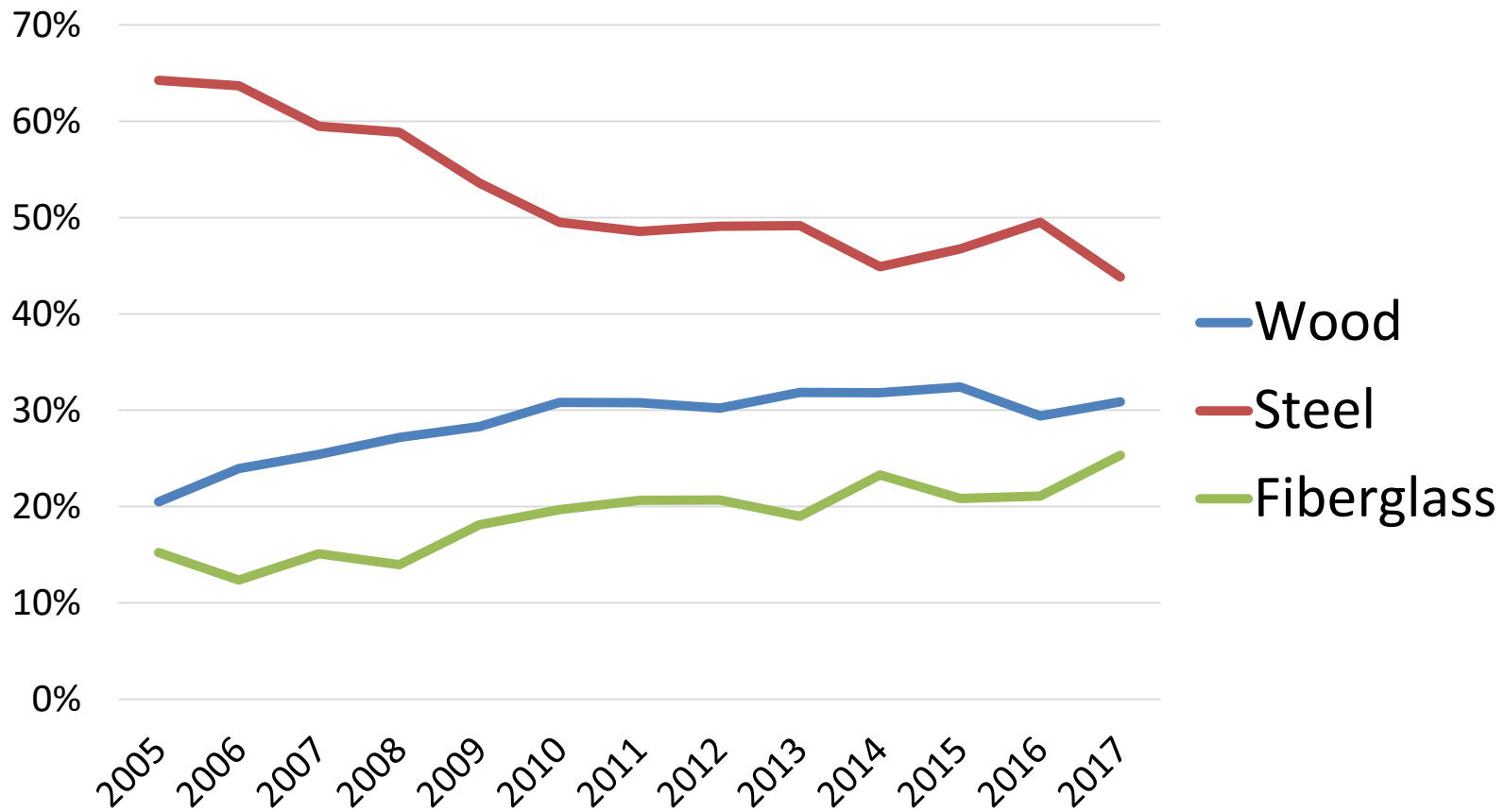
Smooth and flush more popular on Other Entry

**Steel: 41%**  
**Wood: 32%**  
**Fiberglass: 26%**

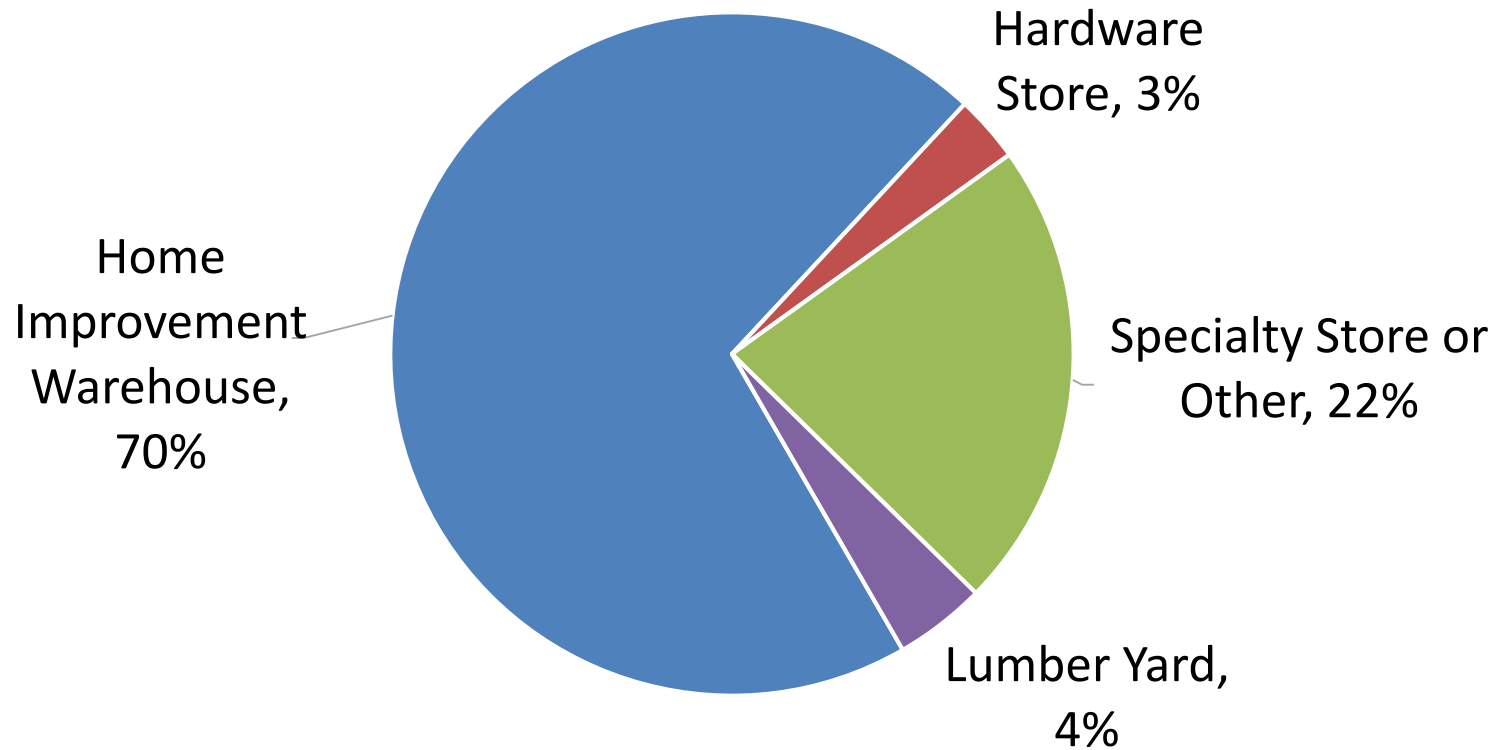
# Front Entry Doors, Home Repair & Remodeling 2017



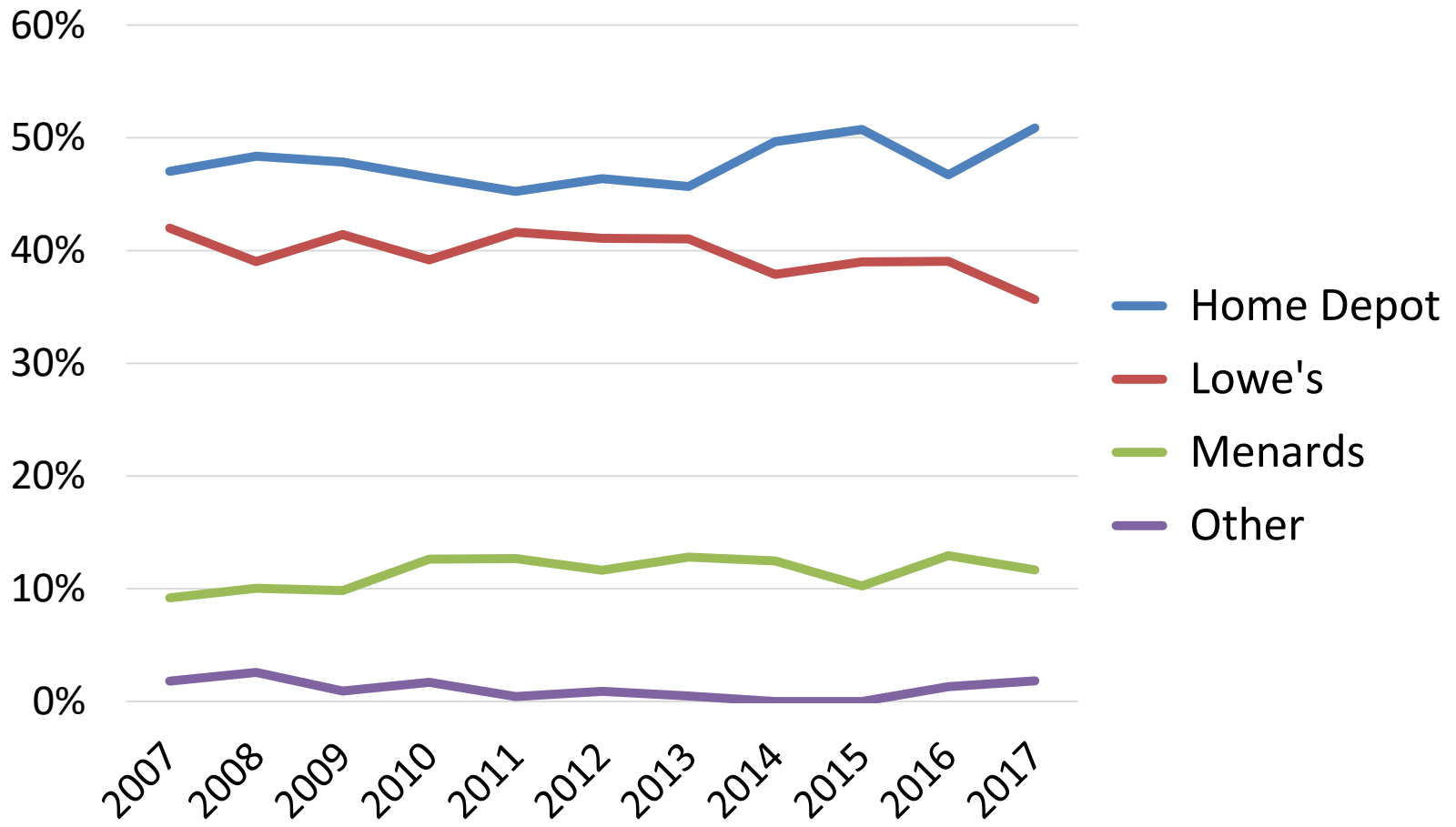
# Other Entry Doors, Home Repair & Remodeling 2017



# Place of Purchase – Exterior Entry Doors in Home Remodeling

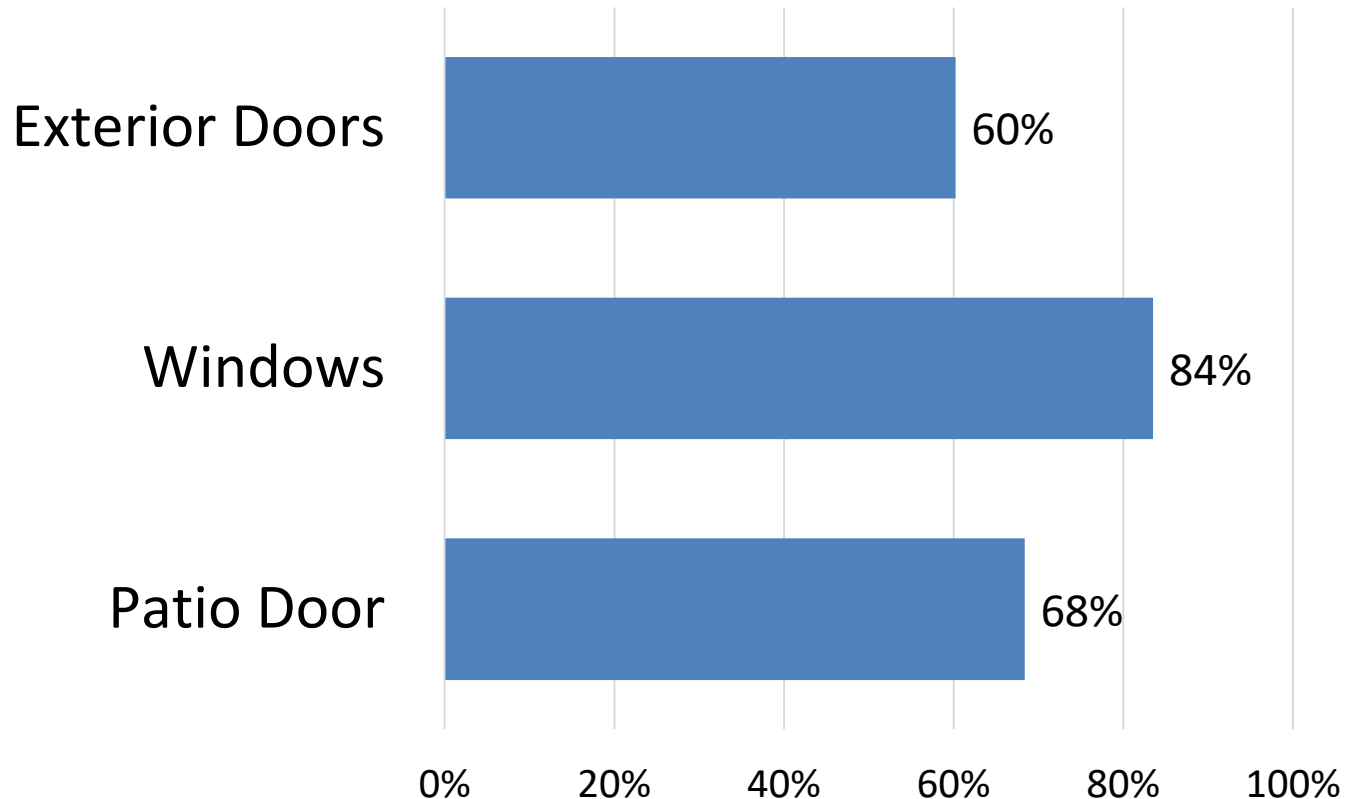


# Shares of Remodeling Exterior Door Purchases at HIWs

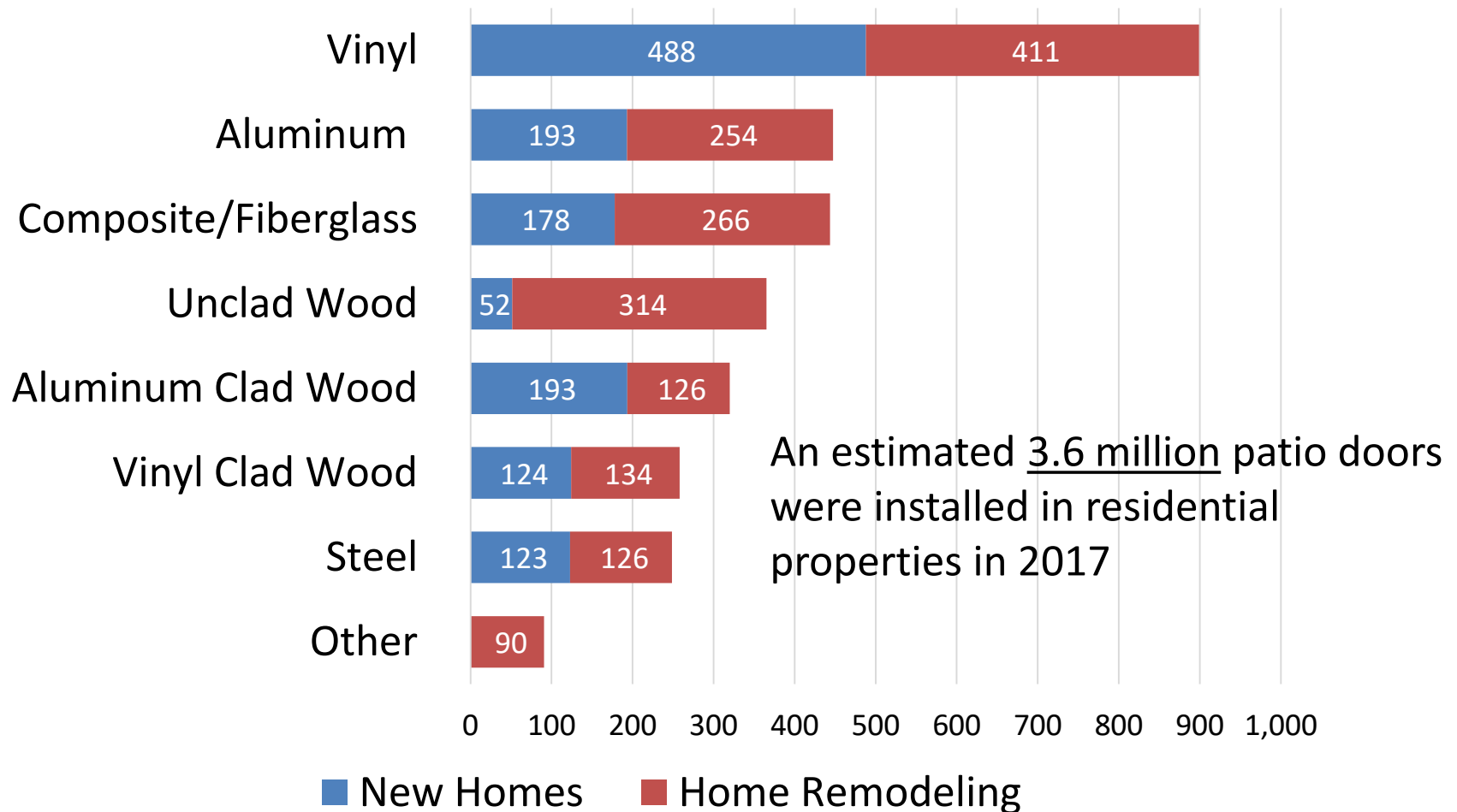




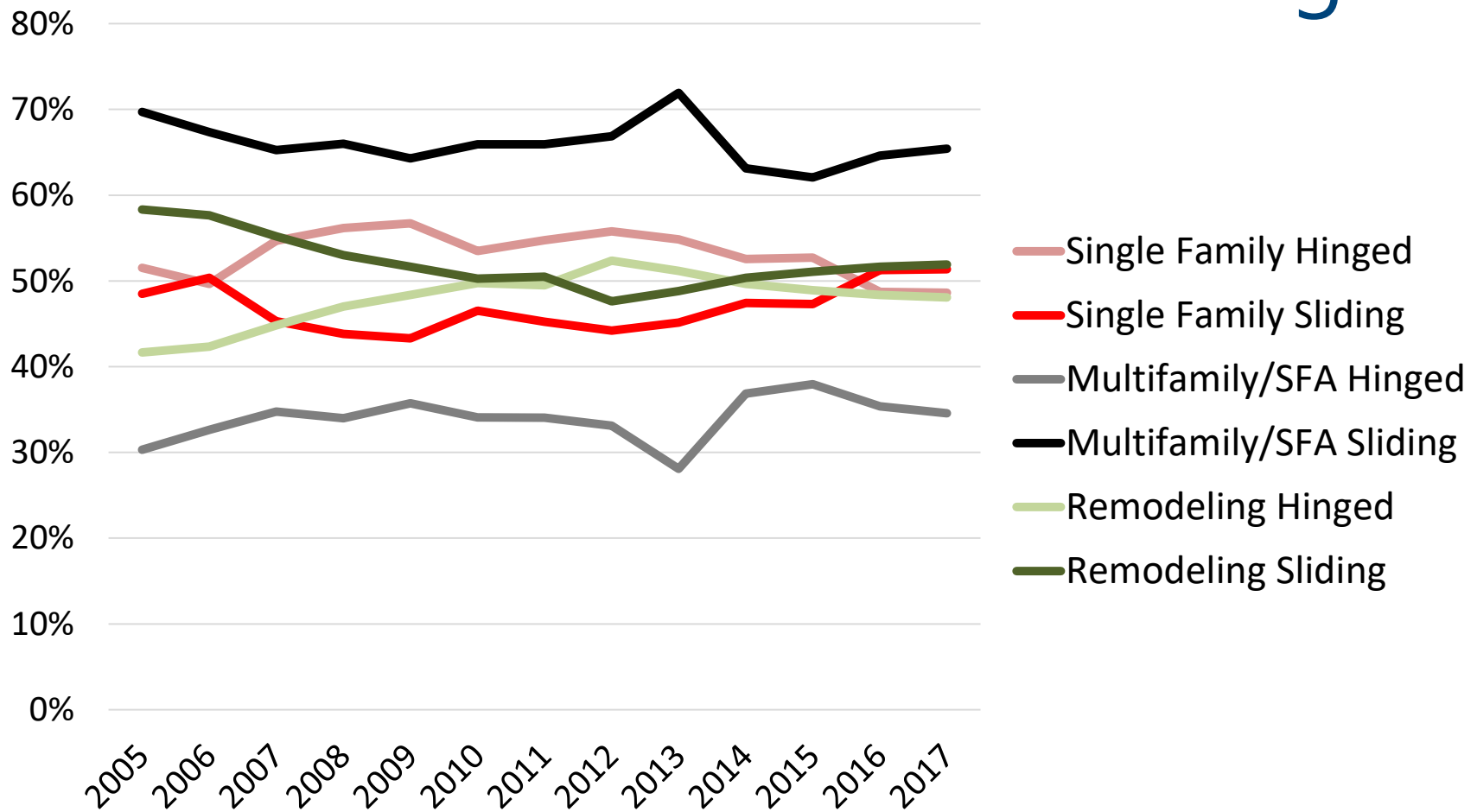
# Share of Professional Installations in Home Remodeling, 2017



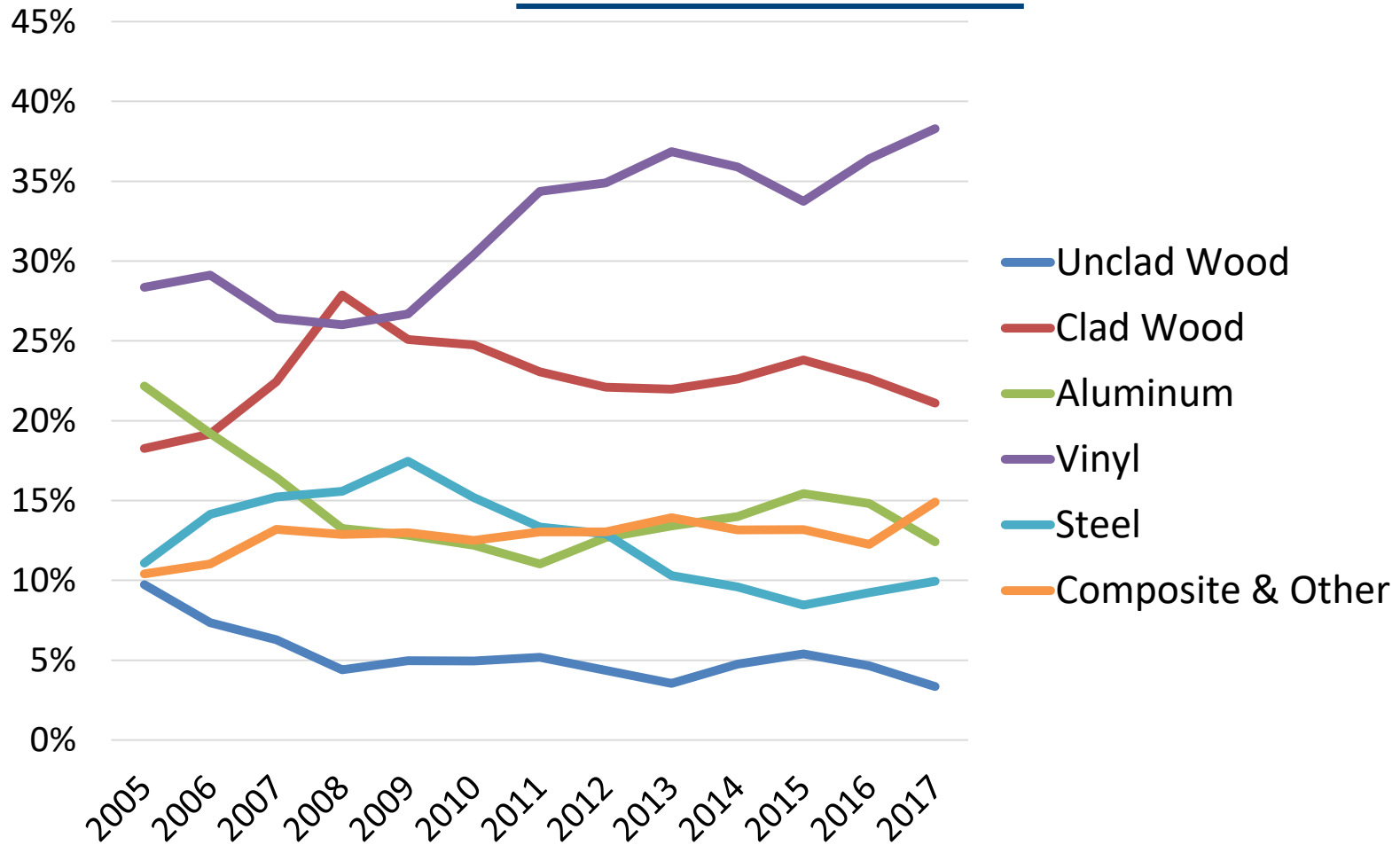
# Patio Door Purchases in New Homes & Remodeling, 2017



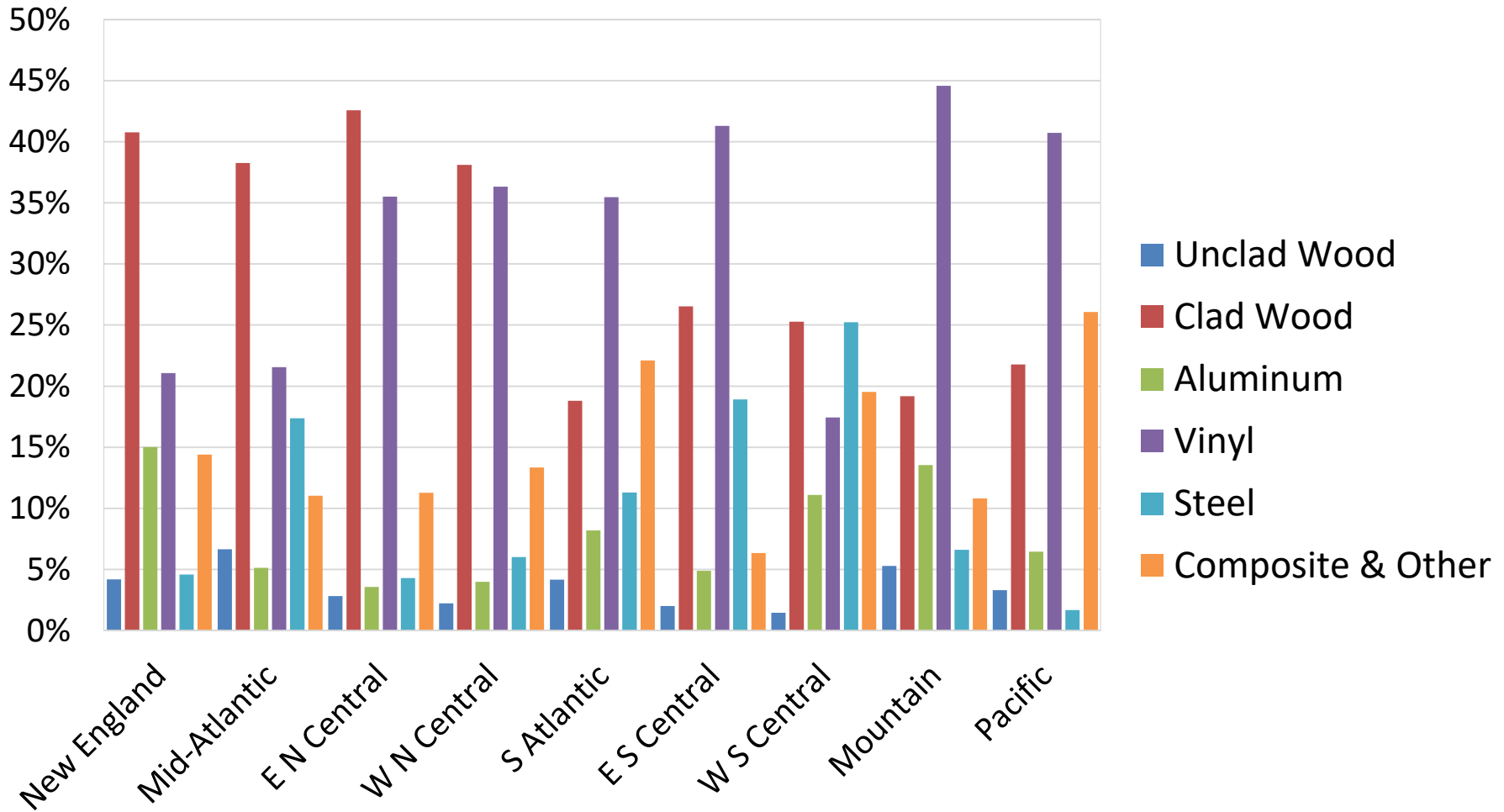
# Patio Door Operation in New Homes & Remodeling



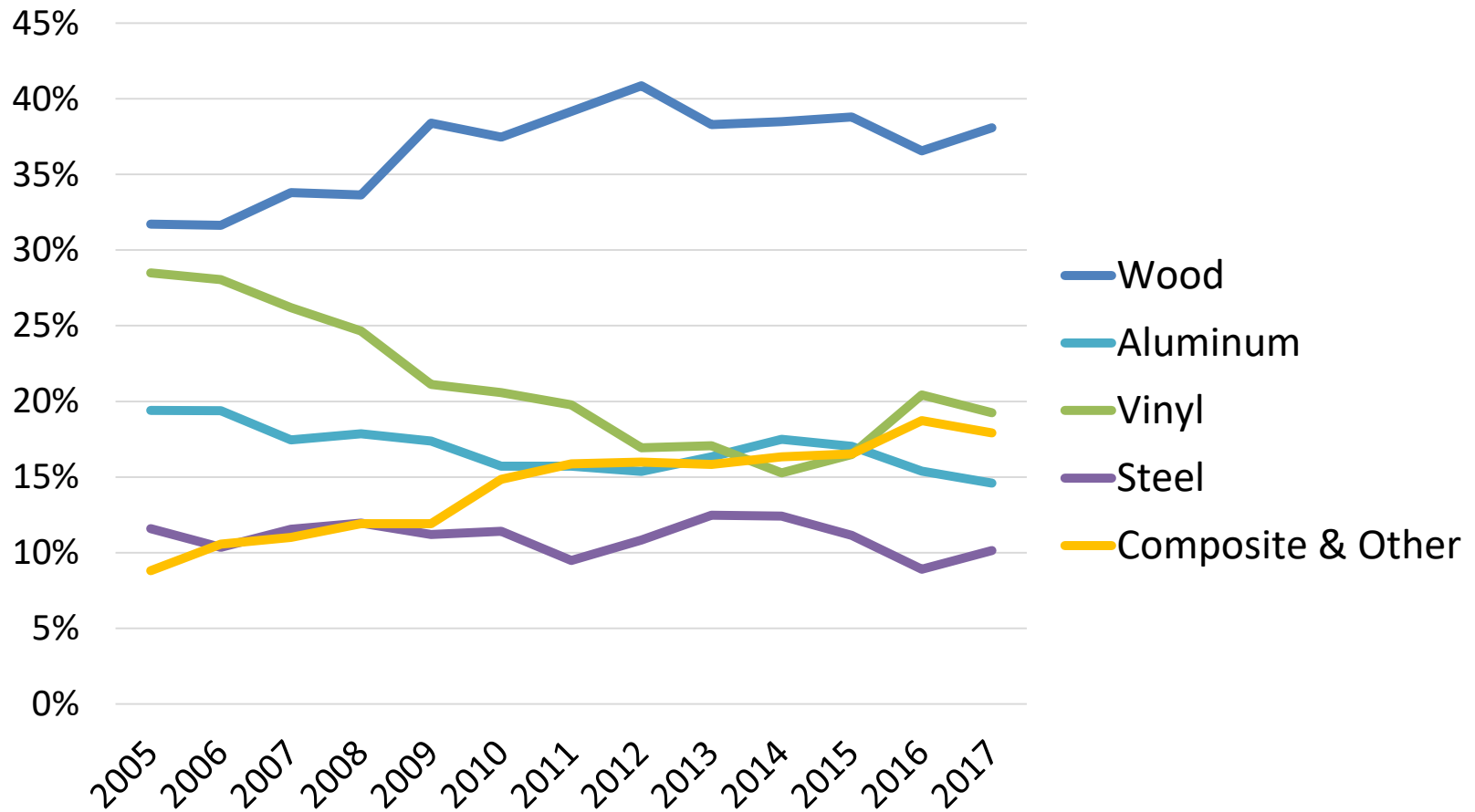
# Patio Door Frame Materials in New Homes



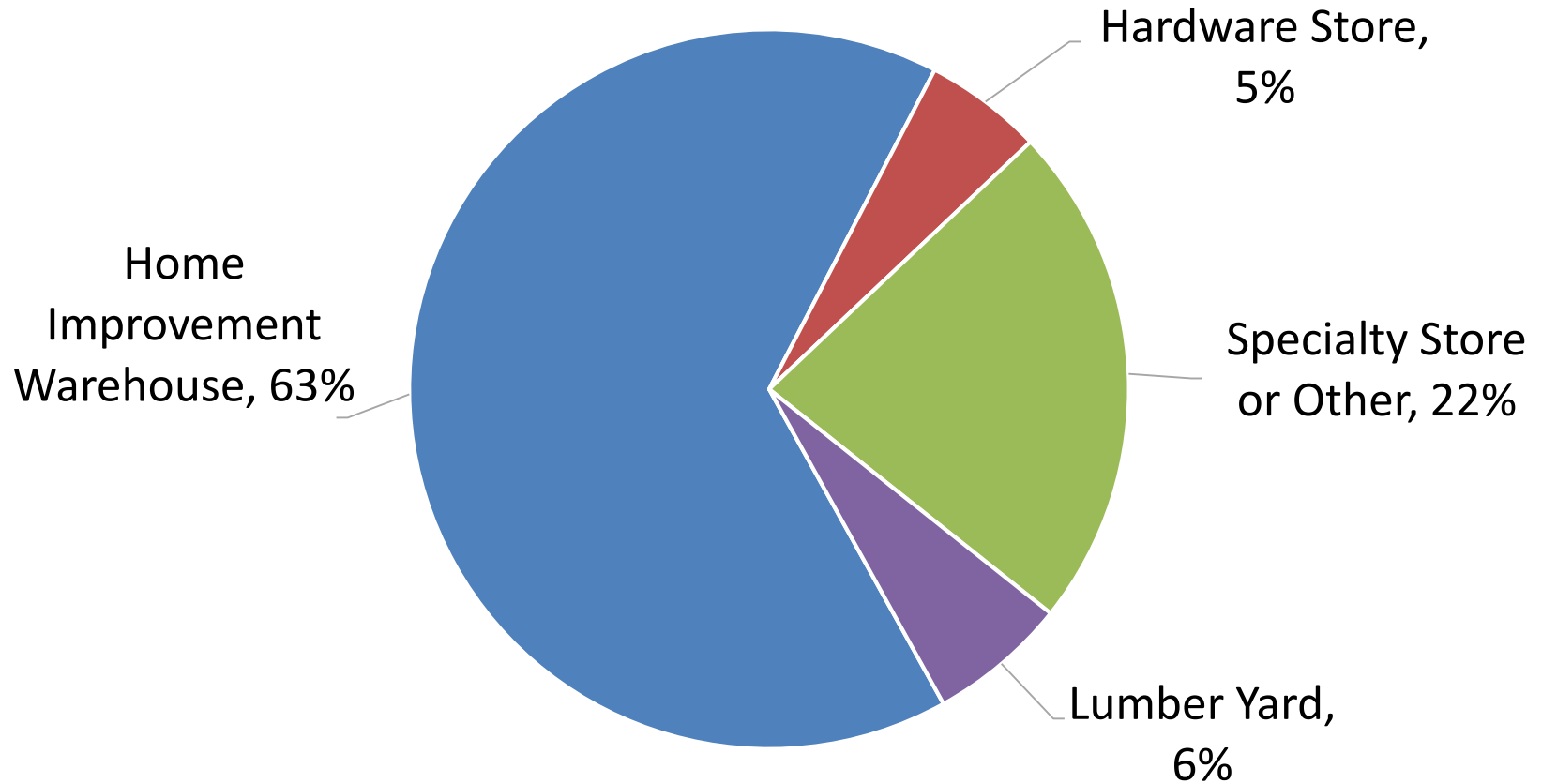
# Geographic Differences in Patio Doors for New Homes, 2017



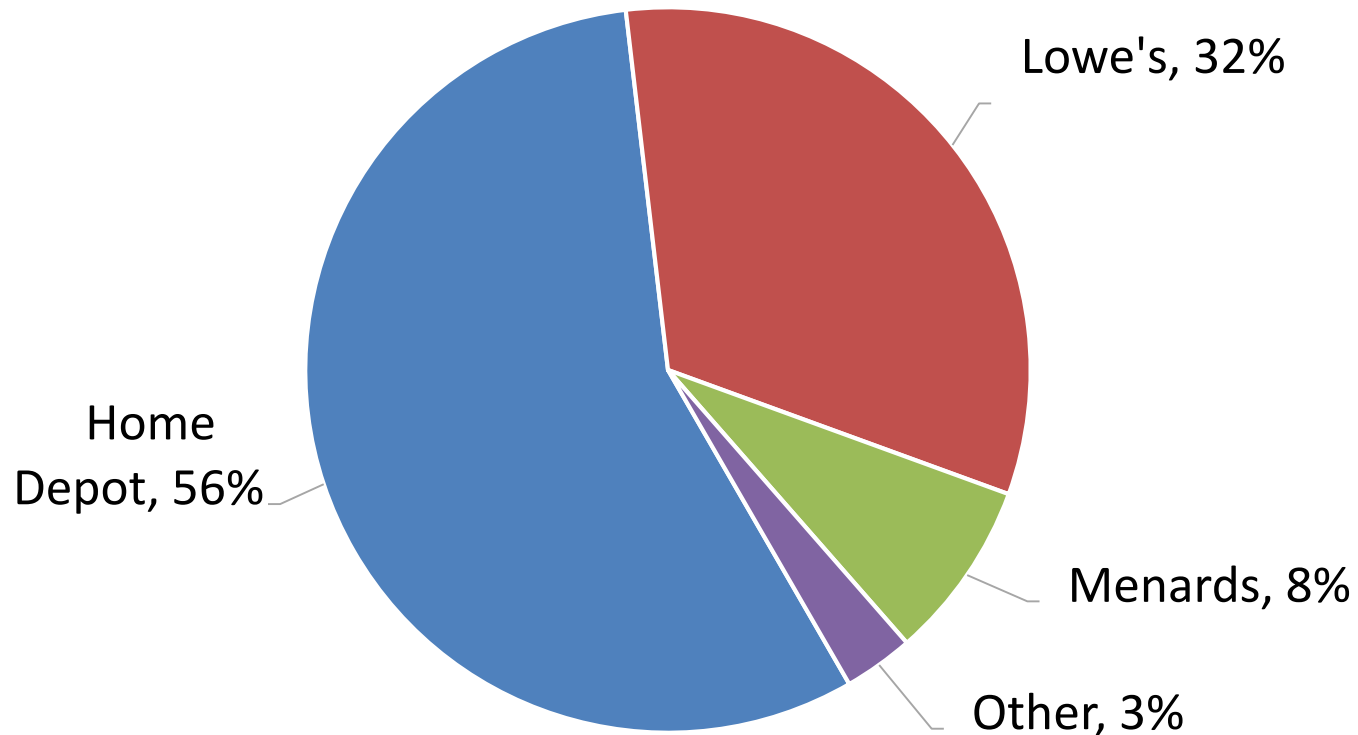
# Patio Doors in Home Remodeling



# Place of Purchase – Patio Doors in Home Remodeling



# HIW Patio Door Place of Purchase in Home Remodeling, 2017





# Labor Shortage Impact Affecting Windows & Doors

- Overall impact of labor shortage – fewer skilled workers on-site, higher cost of labor
- Builders favor more foolproof, those that can be installed by lower-skilled employees
- Quicker installations also will be preferred
- Potentially supports installation by framing crew
- Demographics + higher cost of installation may pressure increase in DIY installations

# THANK YOU!

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