



Home Innovation
RESEARCH LABS

MARKET TRENDS AND OPPORTUNITIES FOR PRESSURE SENSITIVE TAPES IN NEW HOMES AND REMODELING

PSTC TAPE WEEK 2022

LAKE BUENA VISTA, FL

Finding Innovation a Home

Home Innovation Research Labs

- Founded in 1964 as wholly-owned subsidiary of National Association of Home Builders
- Independent researchers assisting manufacturers develop and commercialize new building technologies through:
 - Engineering research & development
 - Market & field research
 - Laboratory testing
- #1 in U.S. green home certification—National Green Building Standard
- Annual tracking studies of building materials purchases

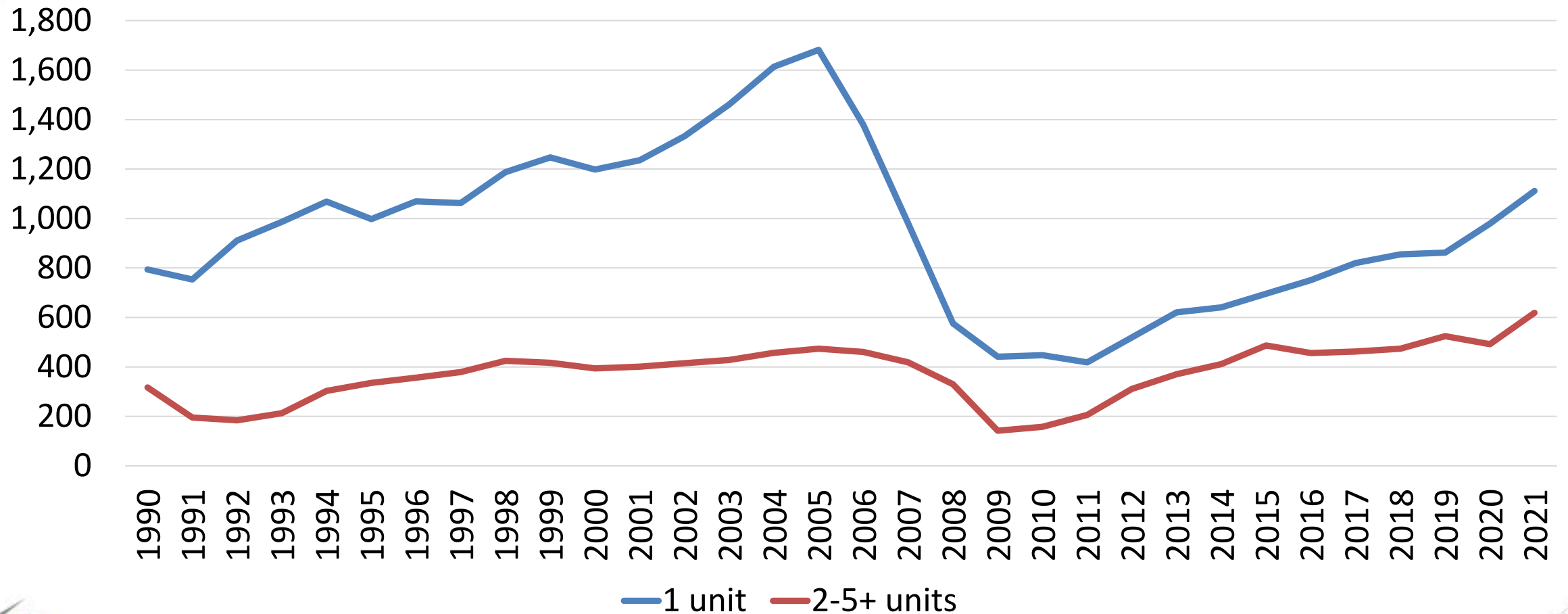


Current Trends in the Building Materials Industry Creating Opportunities for Pressure-Sensitive Tapes

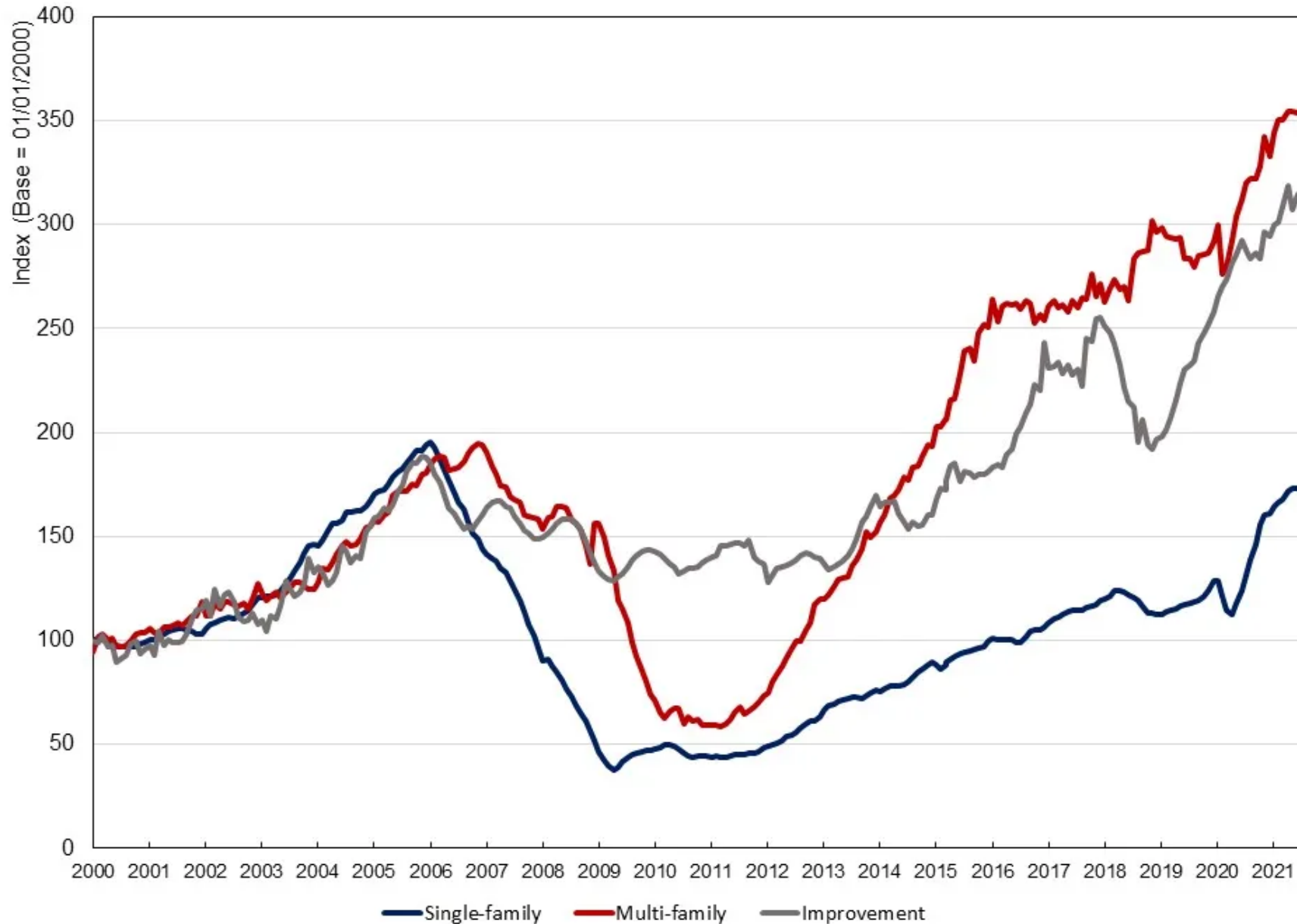
- COVID Pandemic turned focus to homes—creating demand surge for new homes, up-graded and up-sized existing homes
 - Conversions in commercial construction getting more attention
- Skilled labor shortage intensifies, wages and benefits increasing
 - Average home construction time is now 9 – 10 months
 - Market strongly swinging to quick-to-install and pre-finished materials
- Construction materials cost increasing, in short supply, long lead times
 - Contractors looking for alternative sources of supply, open for lower cost materials, substitutes for traditional materials
 - OSB & Plywood prices up by 500% since pandemic began
- Declining availability of development land in metro areas
 - Flight to “exurbs” continues – COVID provided tailwinds



Single and Multifamily Housing Starts Permits in U.S. (1990 – 2021)



Private Residential Construction Spending Index



Source: NAHB

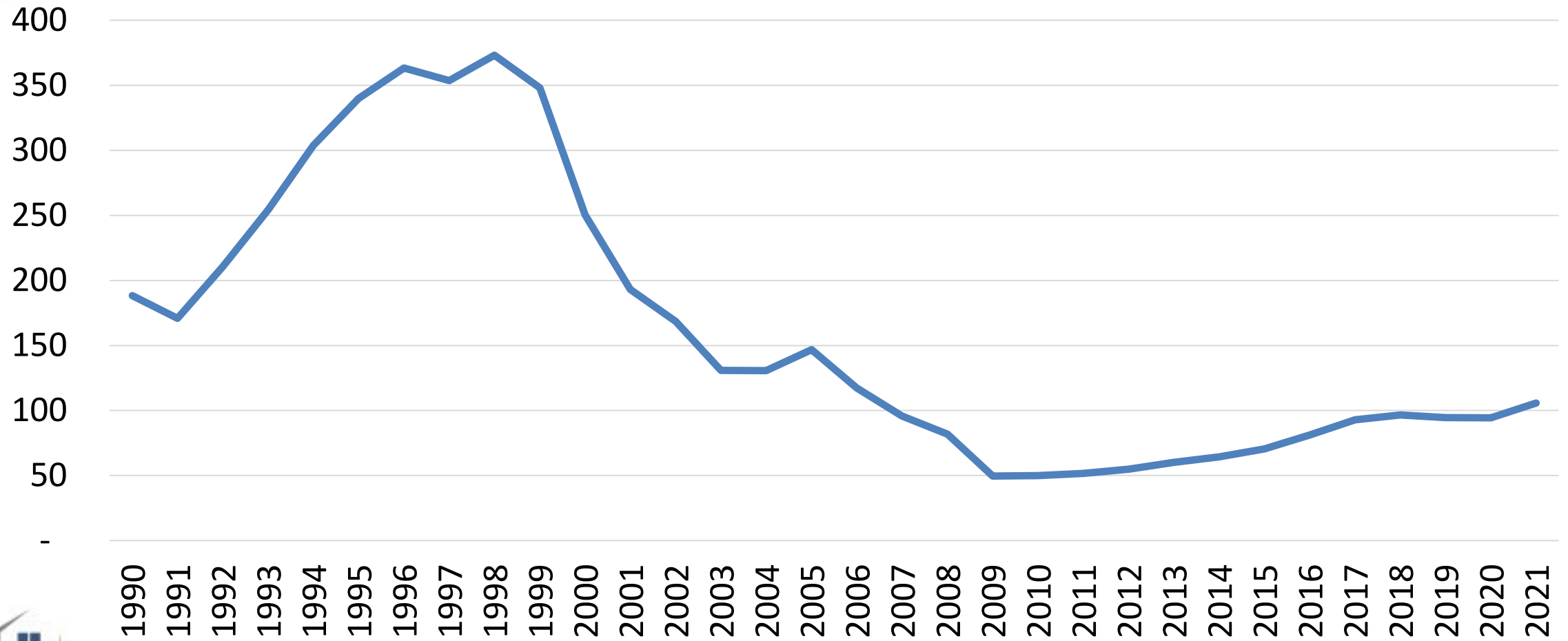
Current Trends in the Building Materials Industry Creating Opportunities for PVC

- Demographics
 - Tech-savvy Millennial buyers now dominate home market, prefer engineered materials
 - Design trends favor Euro/Urban styles and wood finishes on floors
- LVT/LVP flooring category has rejuvenated vinyl tile, plank and sheet markets
- More rigorous energy codes—particularly in sealing building envelope
- Resiliency momentum growing—particularly exterior building envelope
- DIY trending downward but at least temporarily boosted by COVID
- Affordability crisis will lead to opportunities in manufactured housing and...
 - Accessory dwelling units (ADUs)
 - Tiny homes
 - Park RVs



Shipments of New Manufactured Homes in U.S.

(thousands of shipments)

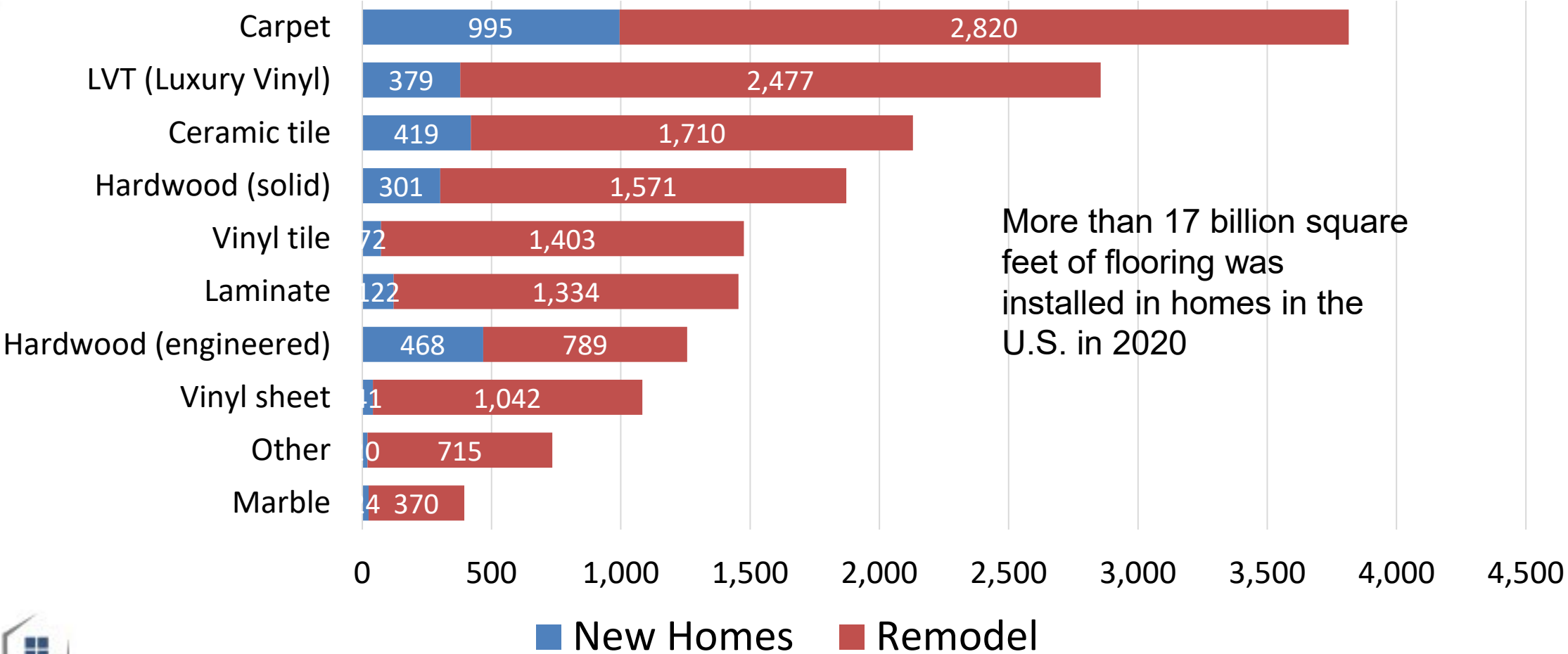




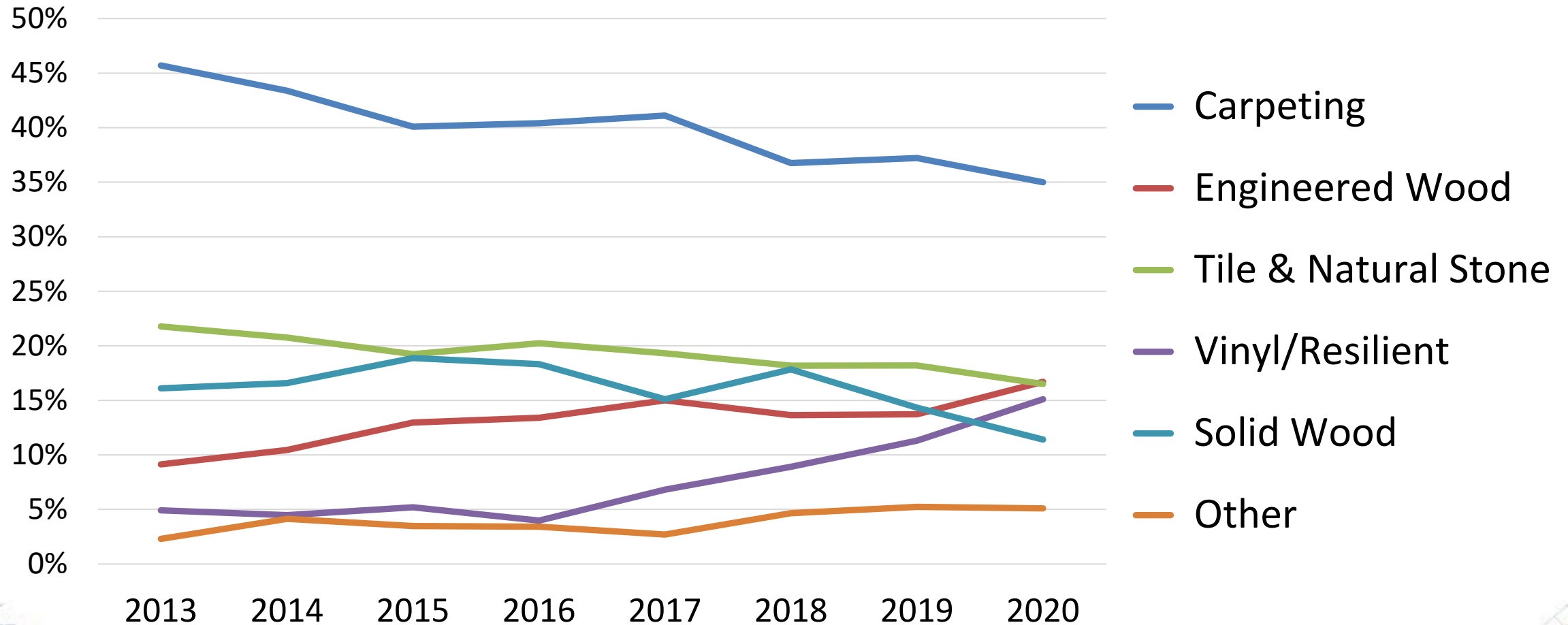
“Peel-and-Stick” Vinyl Flooring Reinvented by Luxury Vinyl



Residential Flooring Installations 2020 (millions of SF)

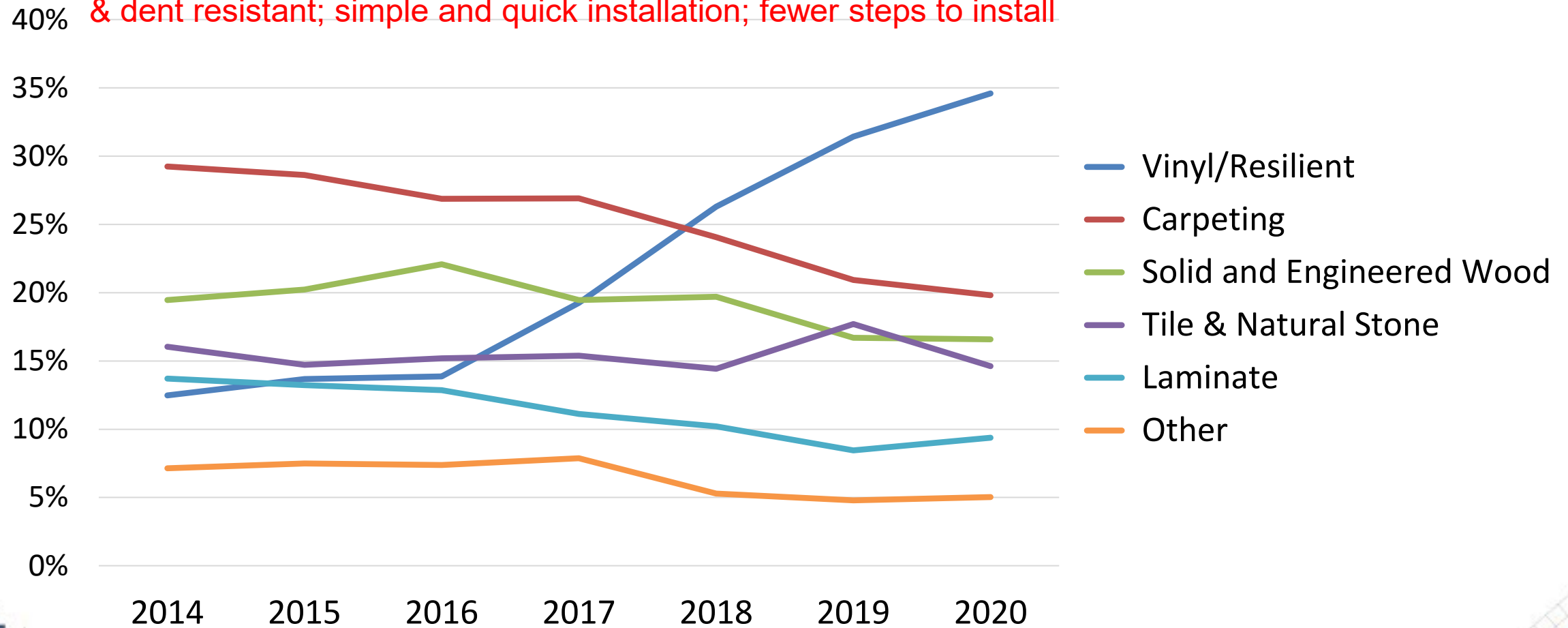


Flooring Trends in New Homes

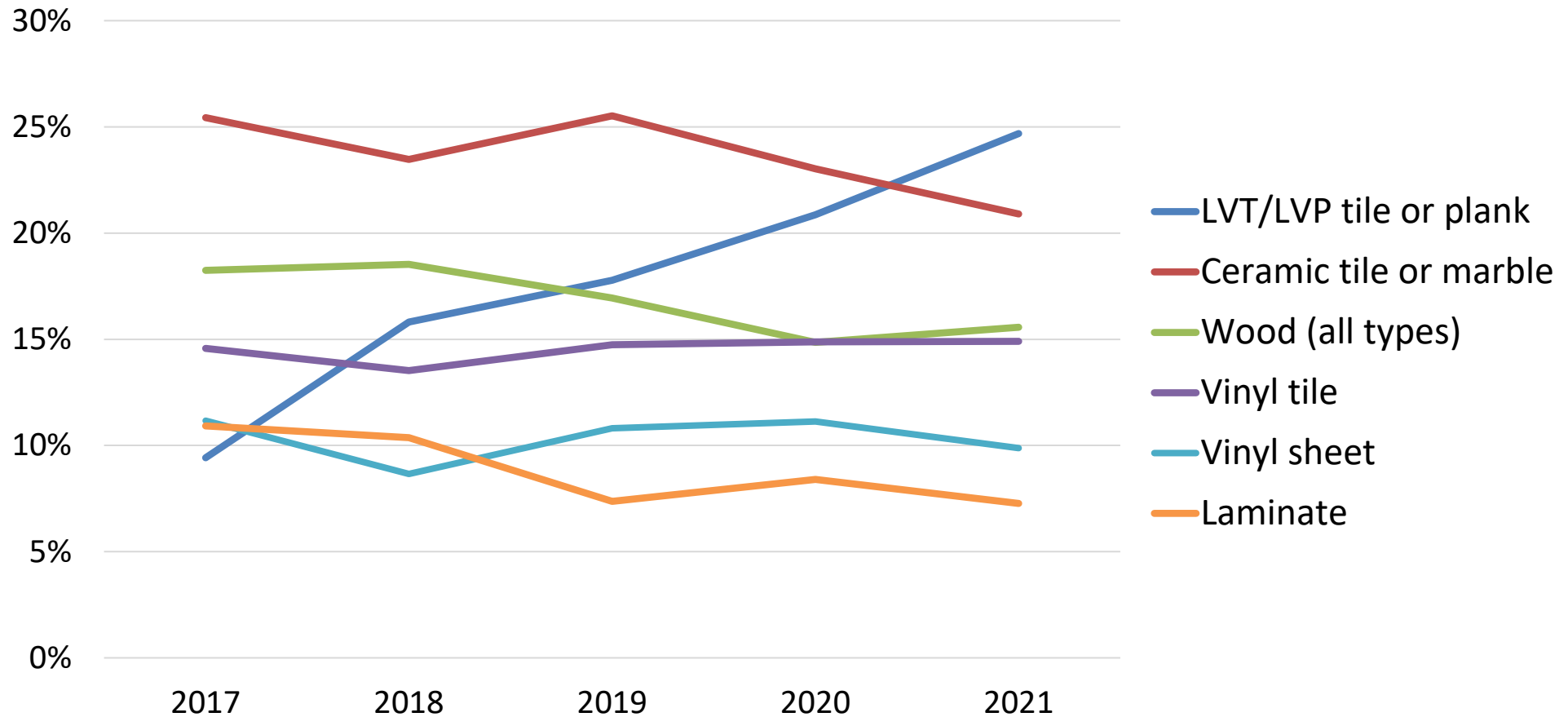


Flooring Trends in Home Remodeling

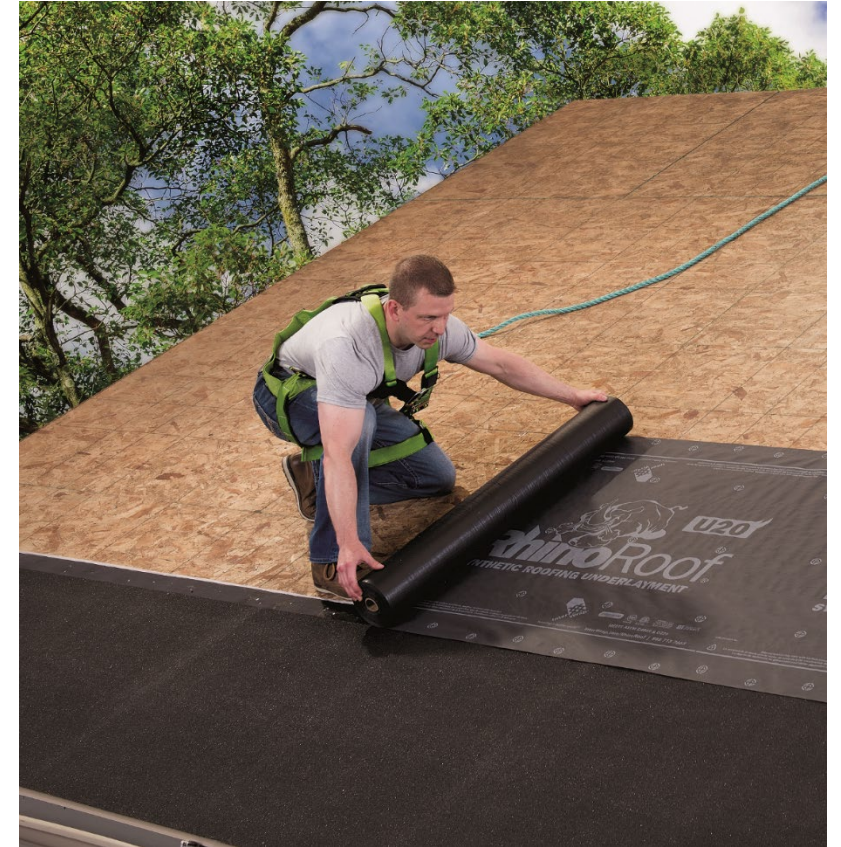
Key factor for Vinyl's recent success—introduction of LVP/LVT. Looks like wood; is water, scratch & dent resistant; simple and quick installation; fewer steps to install.



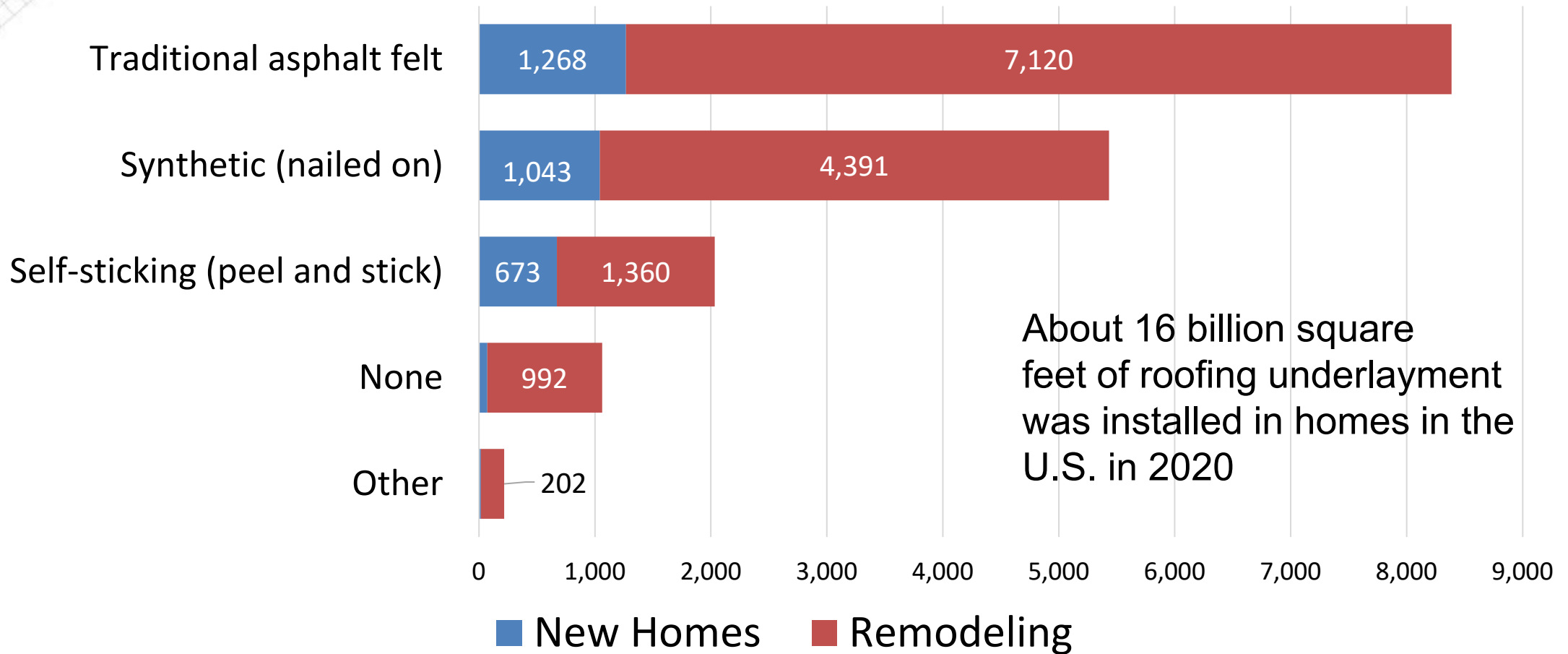
Kitchen Flooring in Home Remodeling



Residential Roofing Underlayment

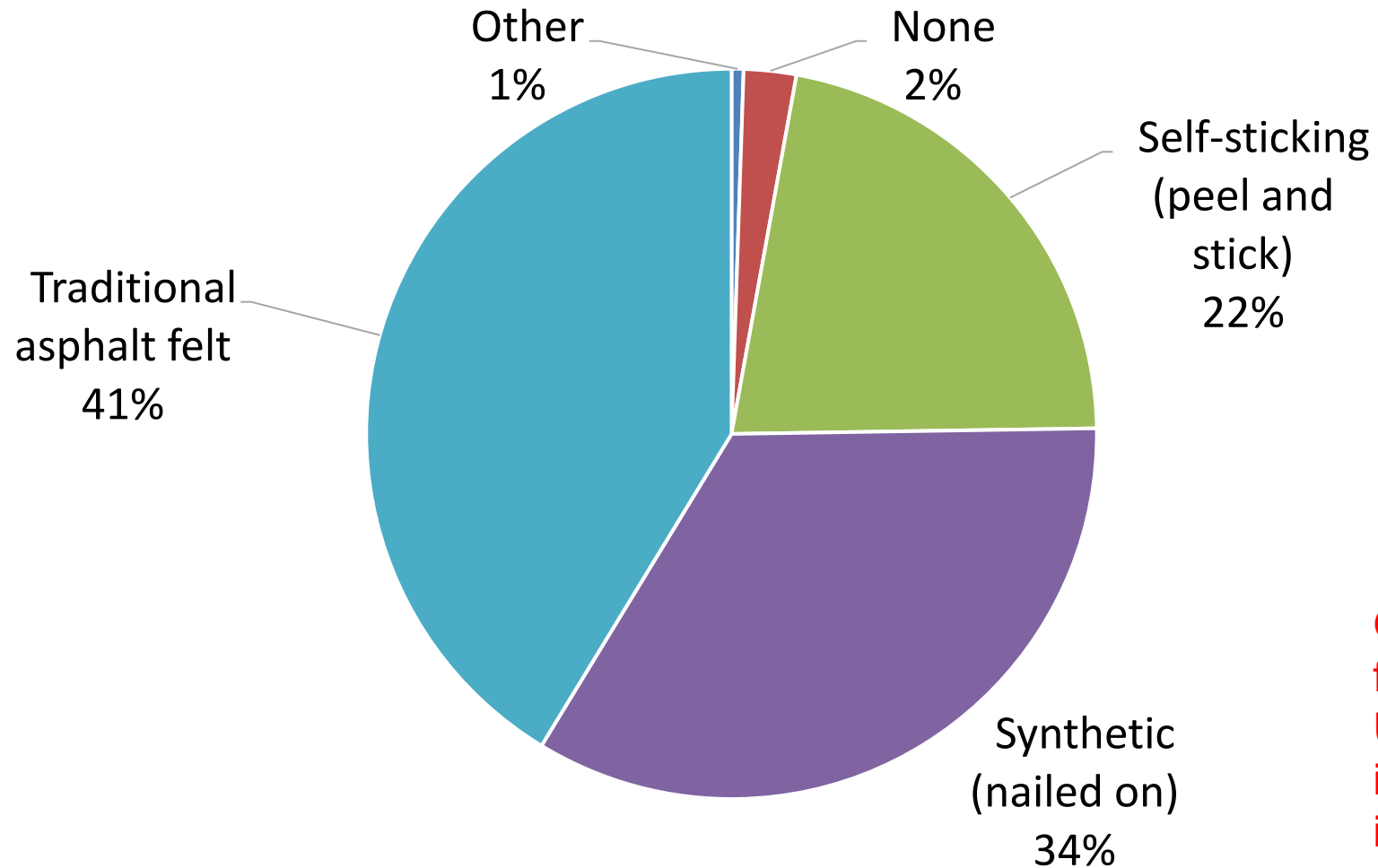


Residential Roofing Underlayment Installations 2020 (millions of SF)



About 16 billion square feet of roofing underlayment was installed in homes in the U.S. in 2020

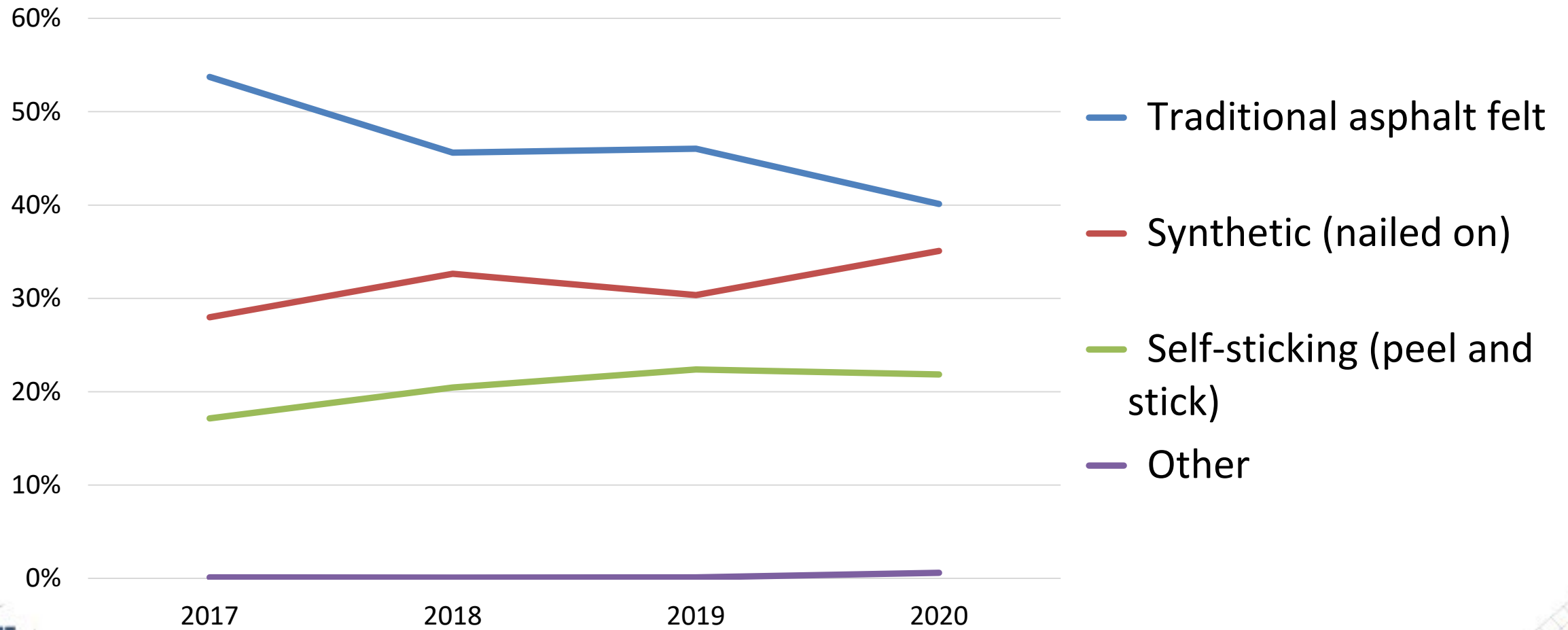
Roofing Underlayment Installations on New Homes, 2020



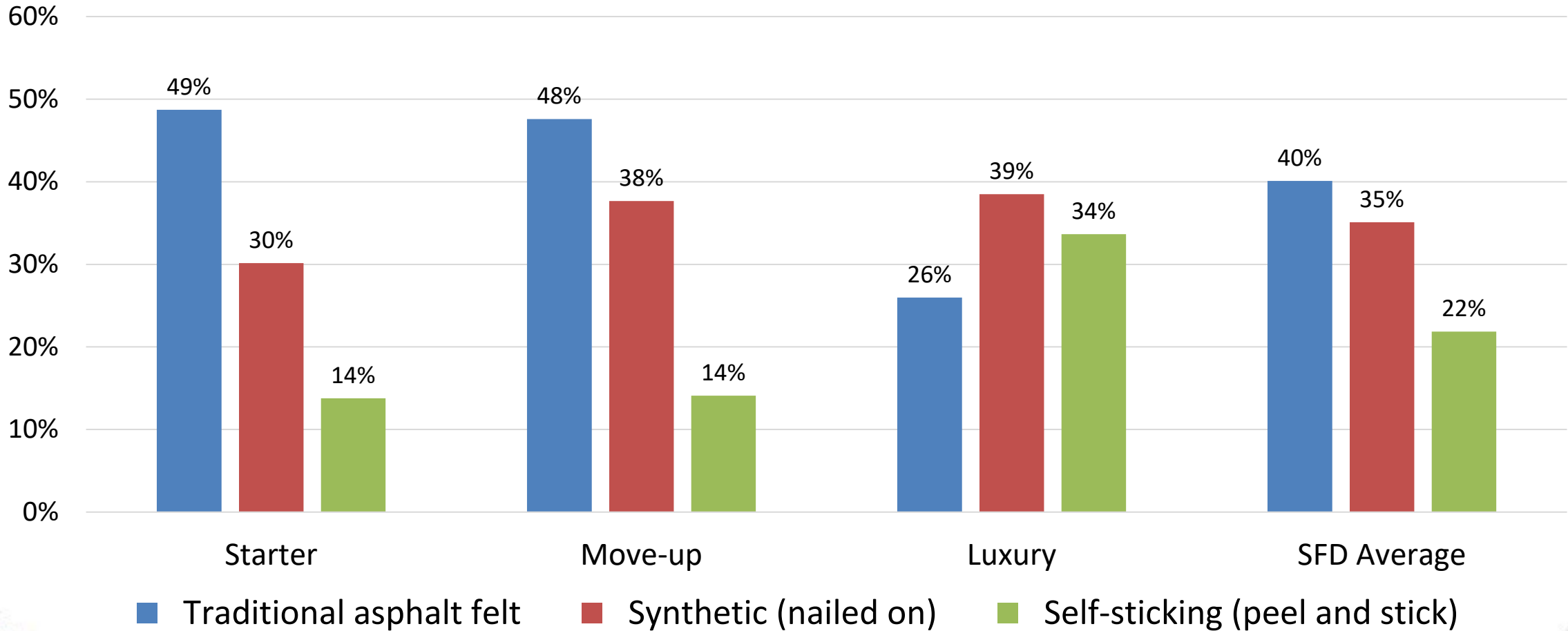
Over 3 billion square feet of Roofing Underlayment was installed in new homes in the U.S. in 2020



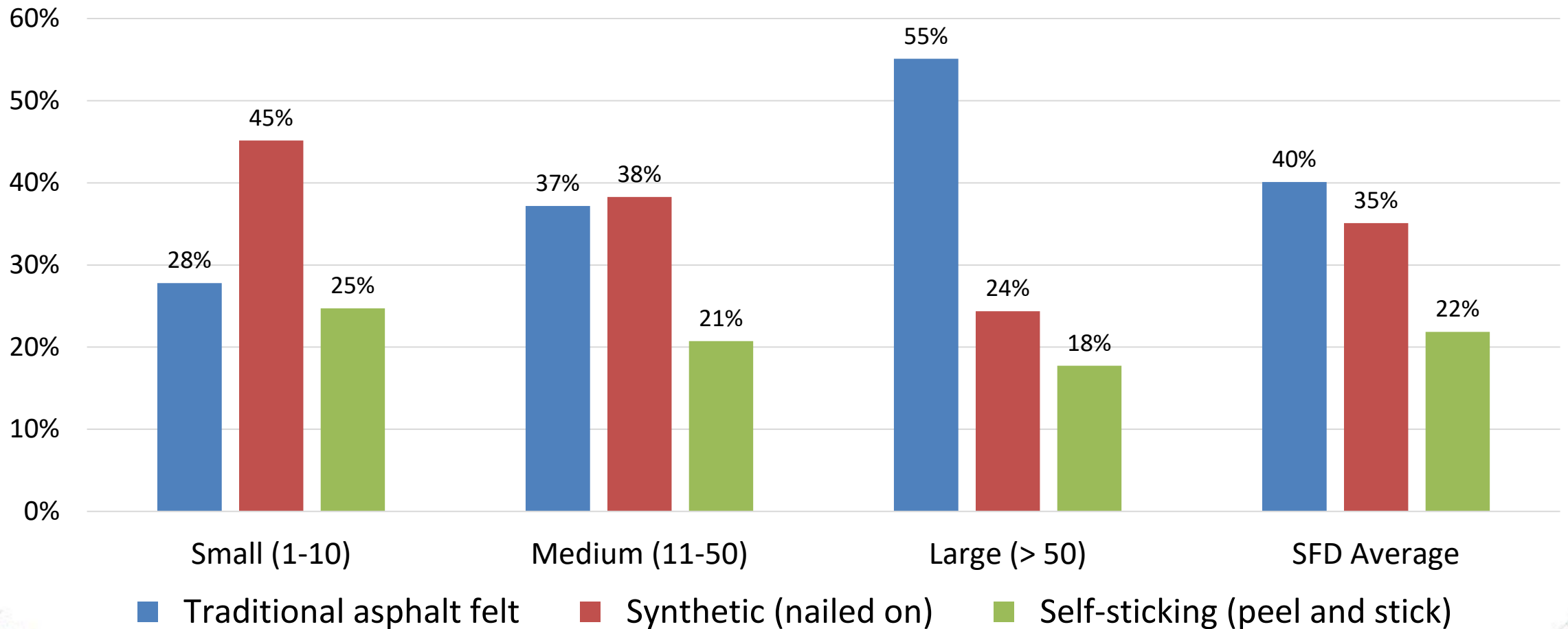
Roofing Underlayment Trend in New Homes



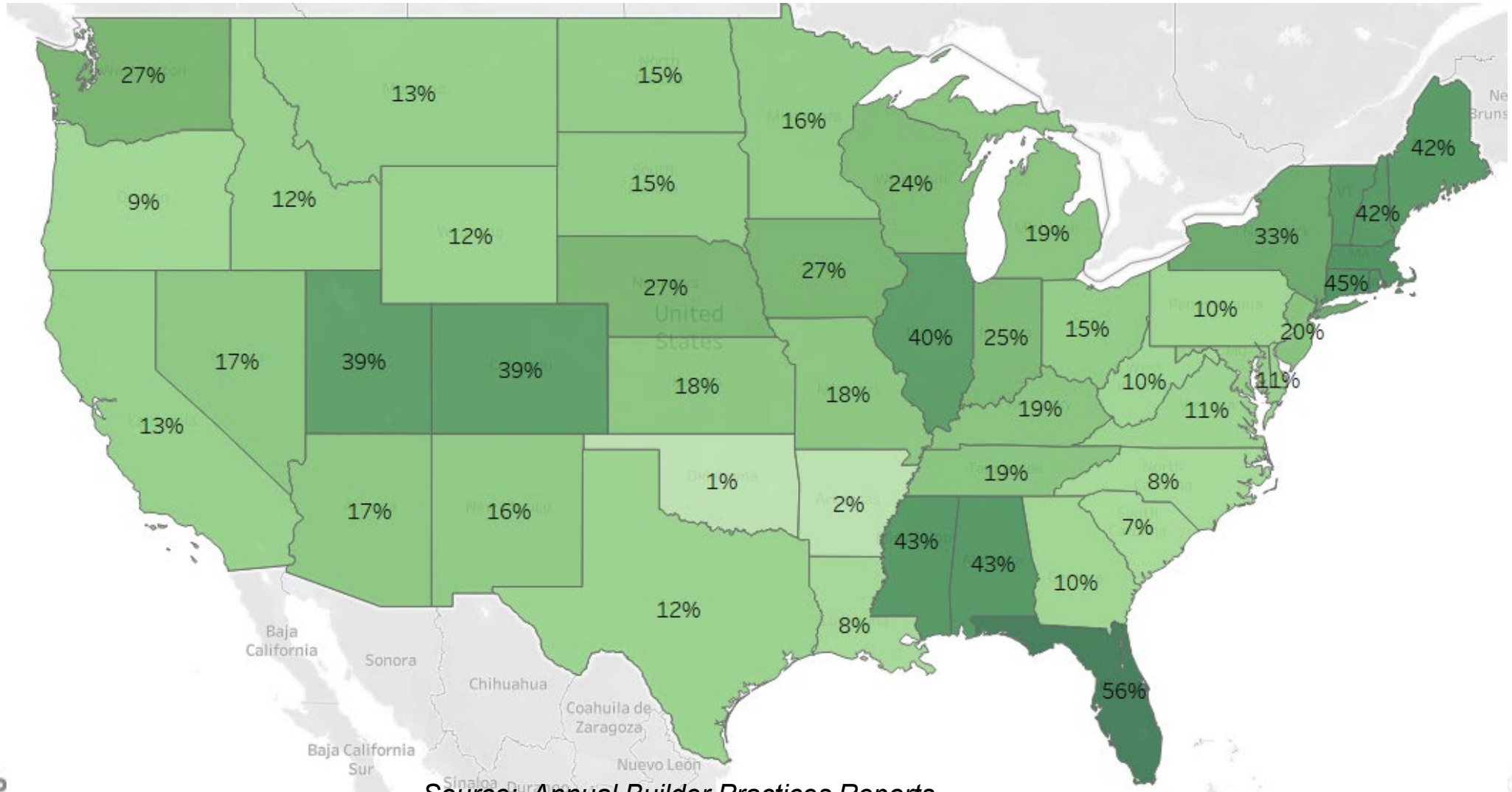
Roofing Underlayment Shares of U.S. New Single Family Homes: Starter, Move-Up, and Luxury (2020)



Roofing Underlayment Use by Size of Single-Family Home Builder (2020)

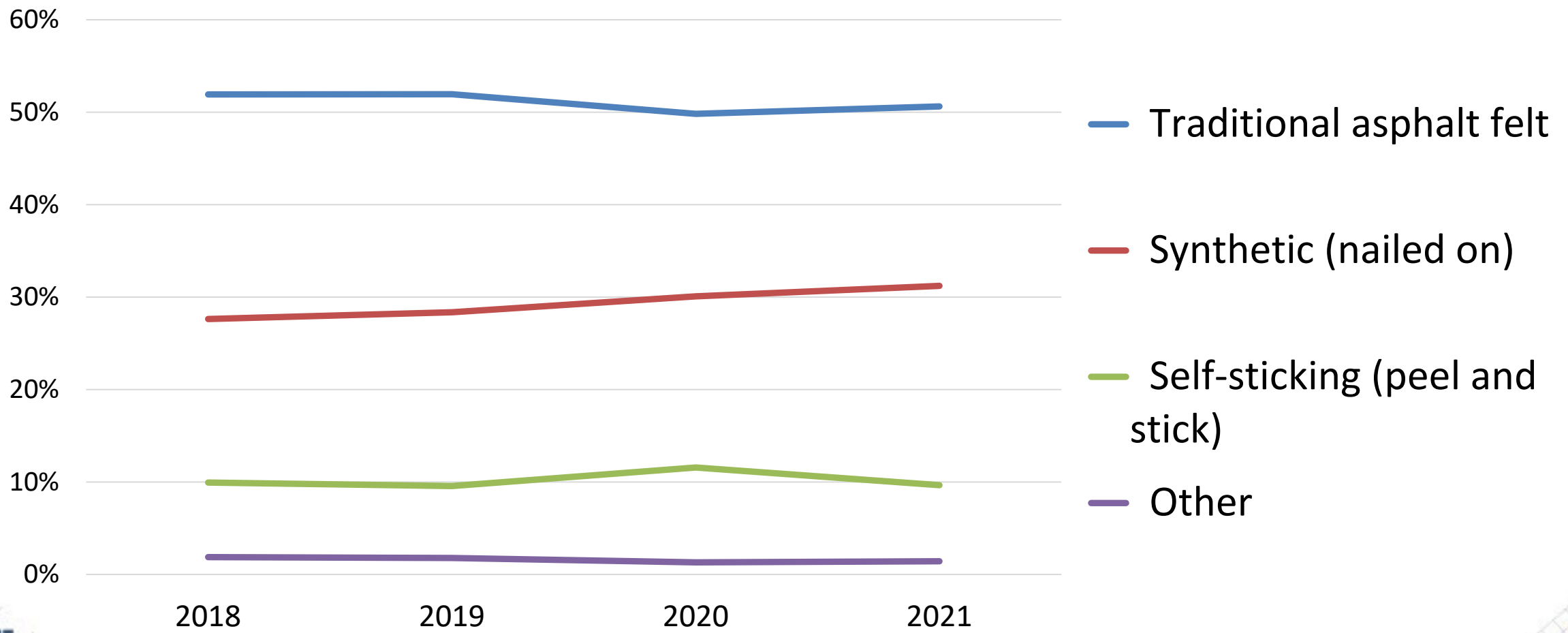


“Peel and Stick” Shares of Roofing Underlayment by State, New Homes (2020)

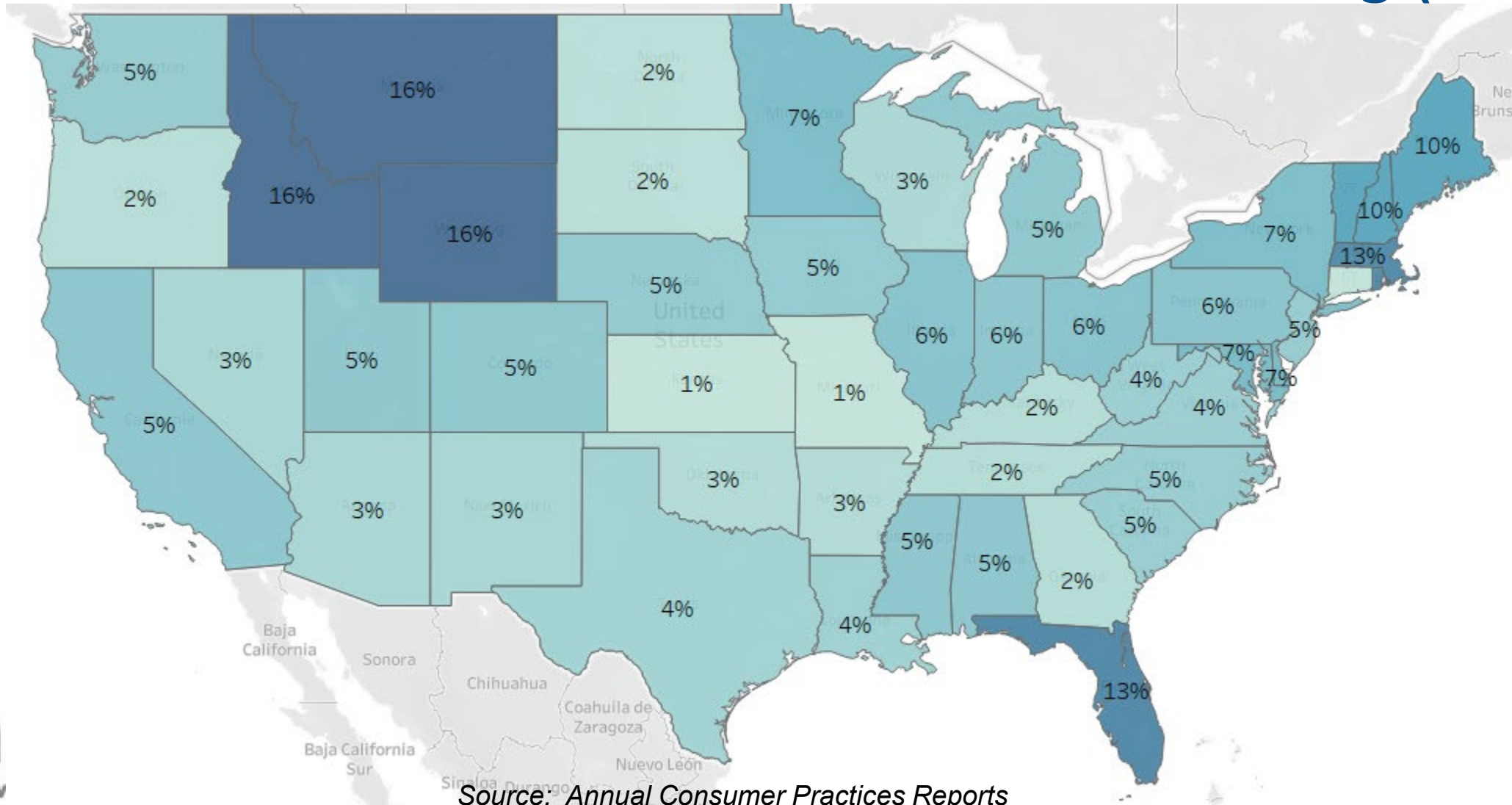


Source: Annual Builder Practices Reports

Roofing Underlayment Trends in Remodeling and Repairs

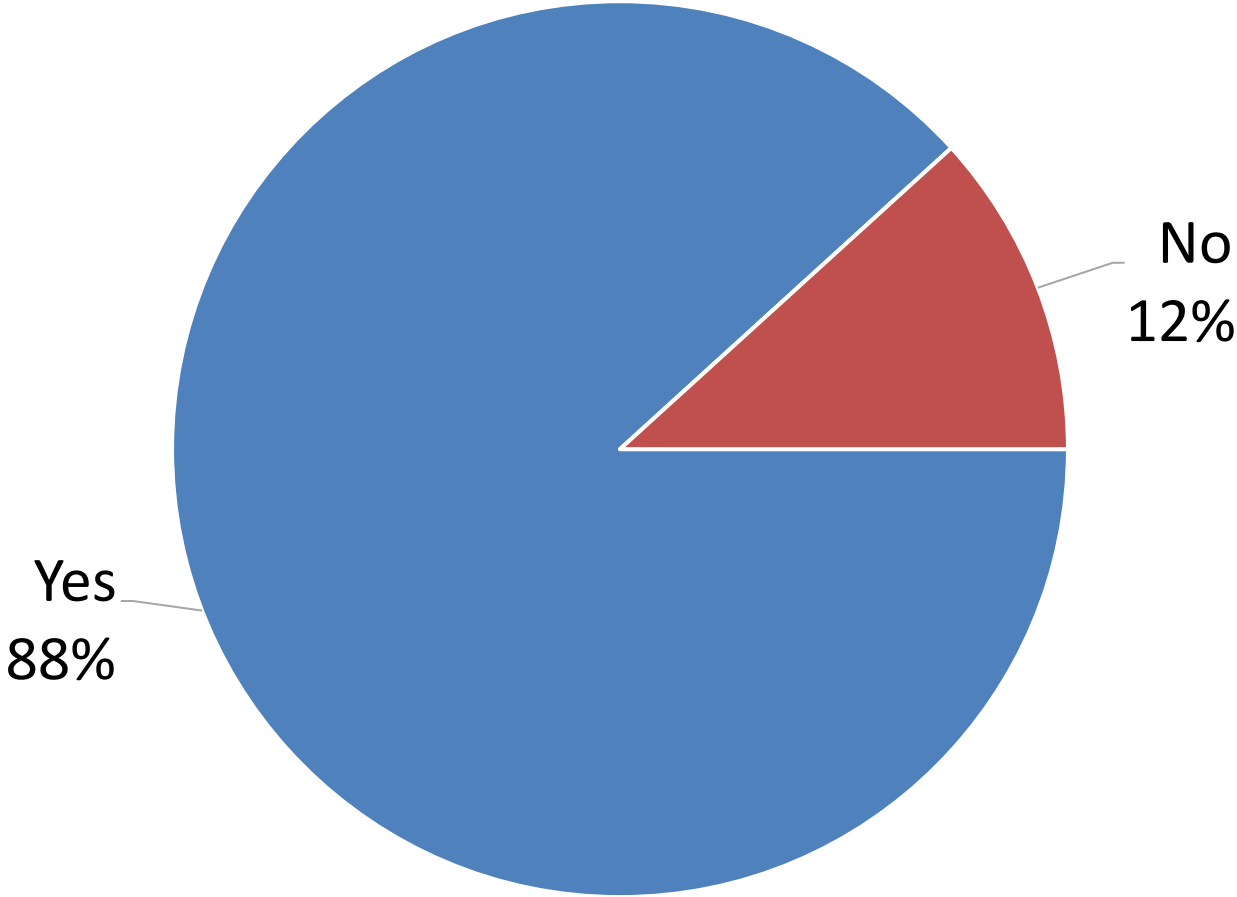


“Peel and Stick” Shares of Roof Underlayment by State for Home Re-Roofing (2020)

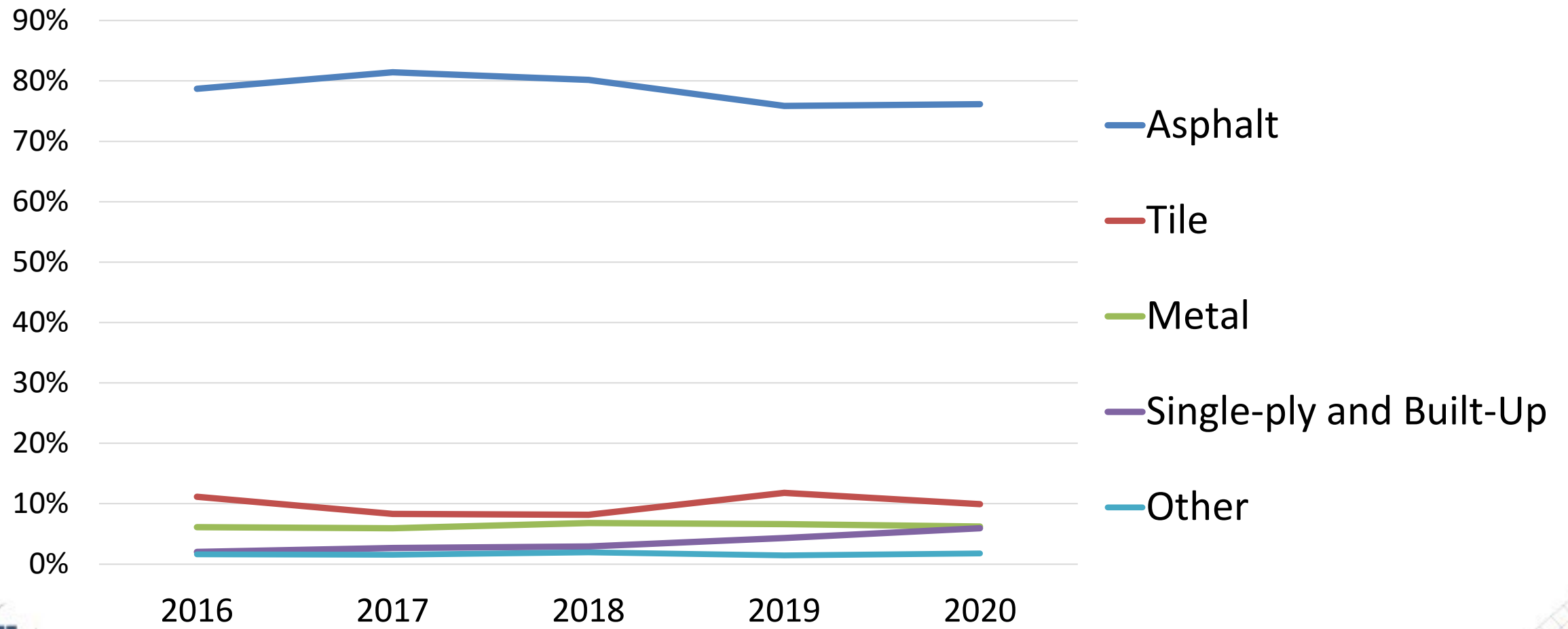


Source: Annual Consumer Practices Reports

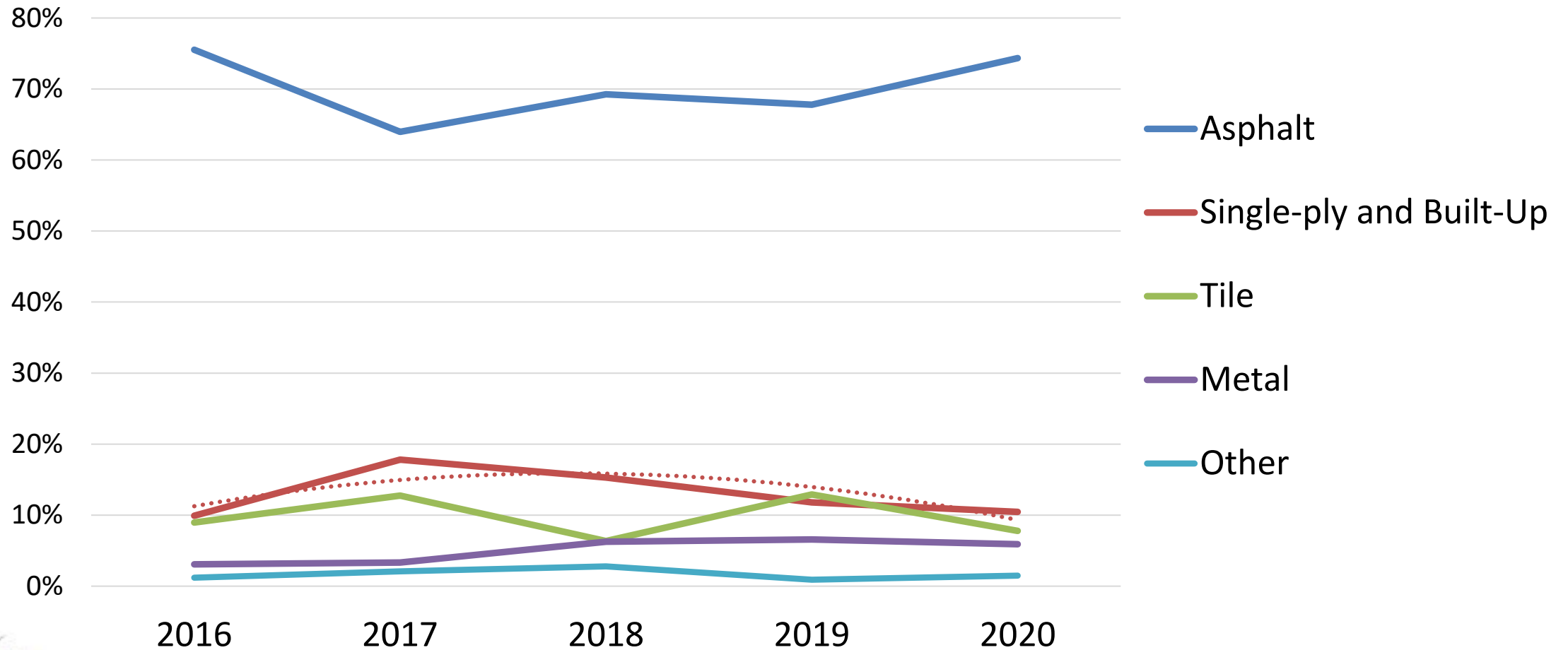
Roofing Underlayment Installed by Professional Contractor? (2020)



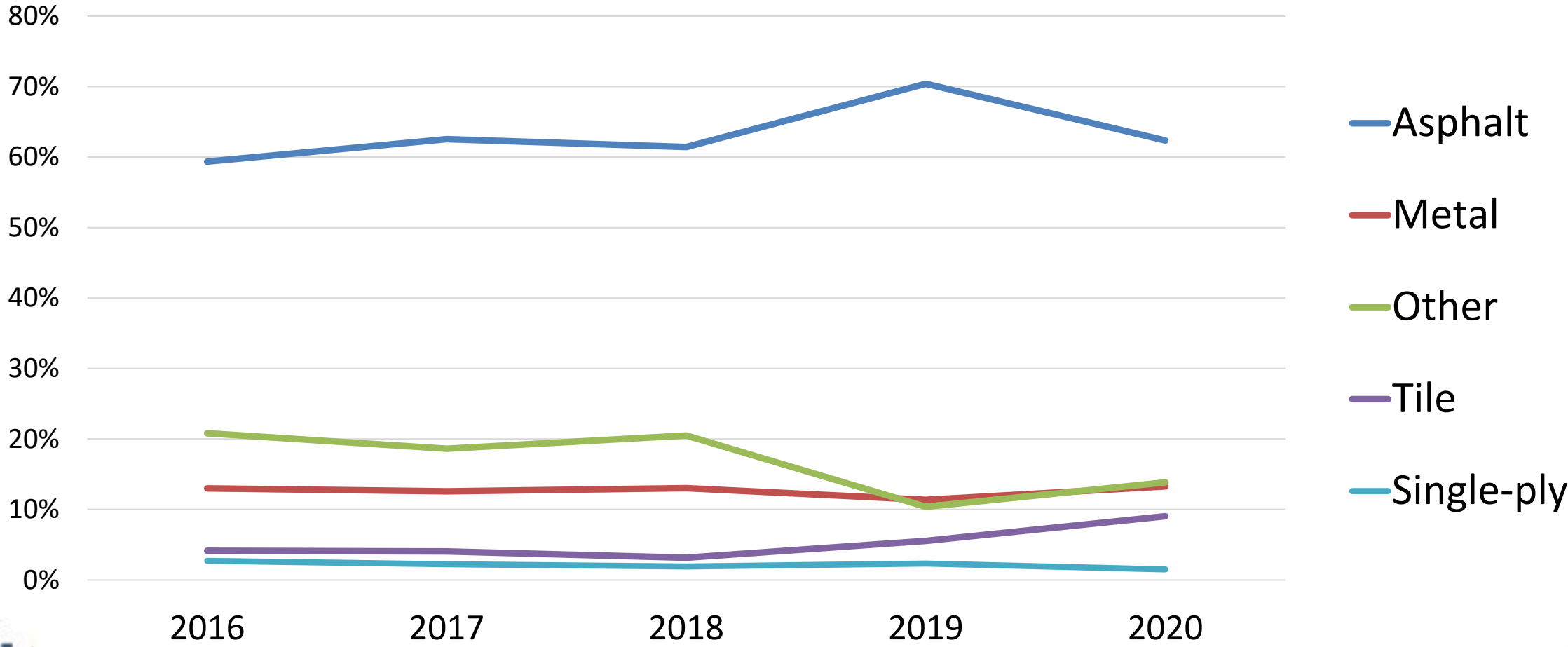
Roofing Trends in New Single-Family Detached Homes



Roofing Trends in New Multi-Family Homes



Roofing Trends in Remodeling and Repairs





Another Opportunity: Seam Tape on Sloped Roof Decks

- Roof sheathing seam tape is another method to achieve sealed roof deck
- Potential of 1.5 billion LF potential for seam tape on new roofs annually
- 5 billion LF annual potential for home roof replacements

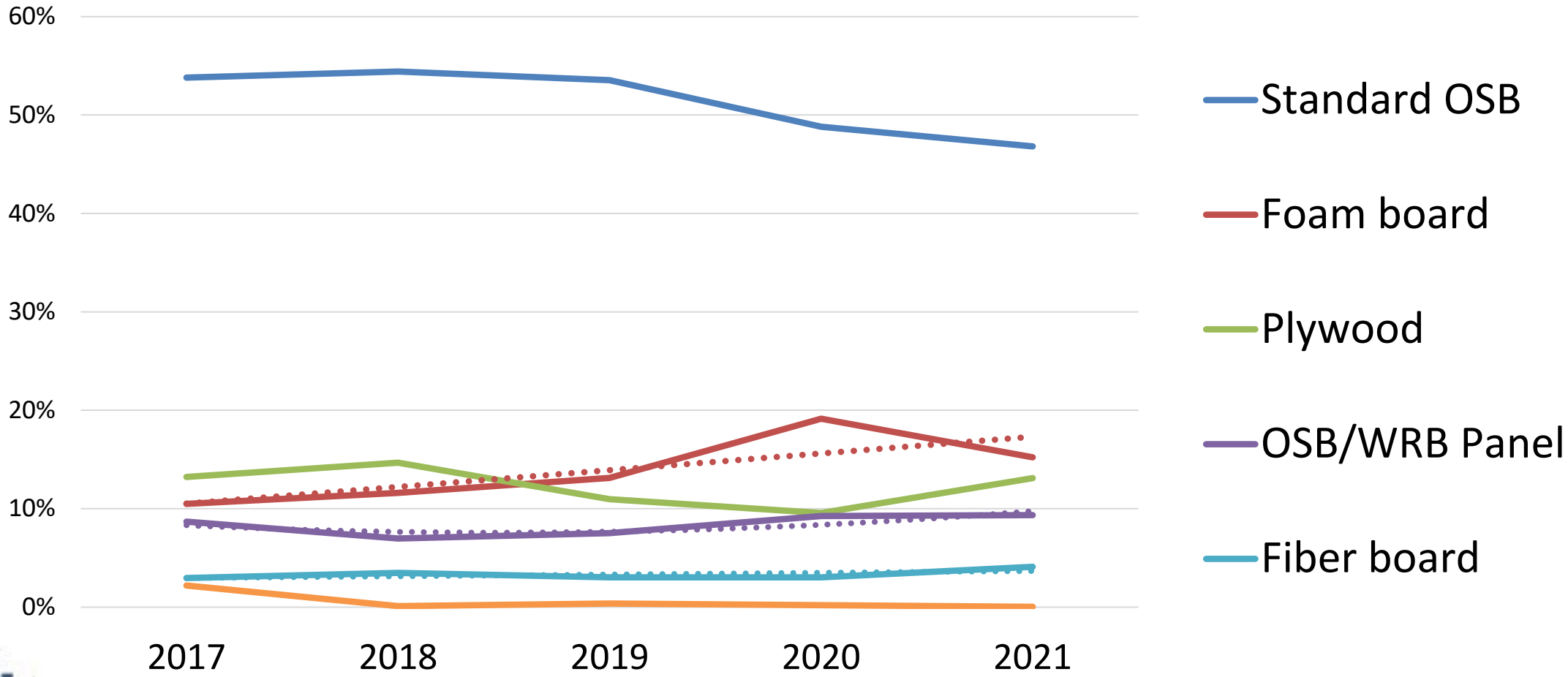


Another Exterior Opportunity: Wall Sheathing Tapes

- Growing popularity of “combination OSB/WRB panels,” foam board, and fiber board sheathing
- Can eliminate need for housewrap, improve airtightness
- Potential of 2 billion LF potential for seam tape on home wall sheathing annually



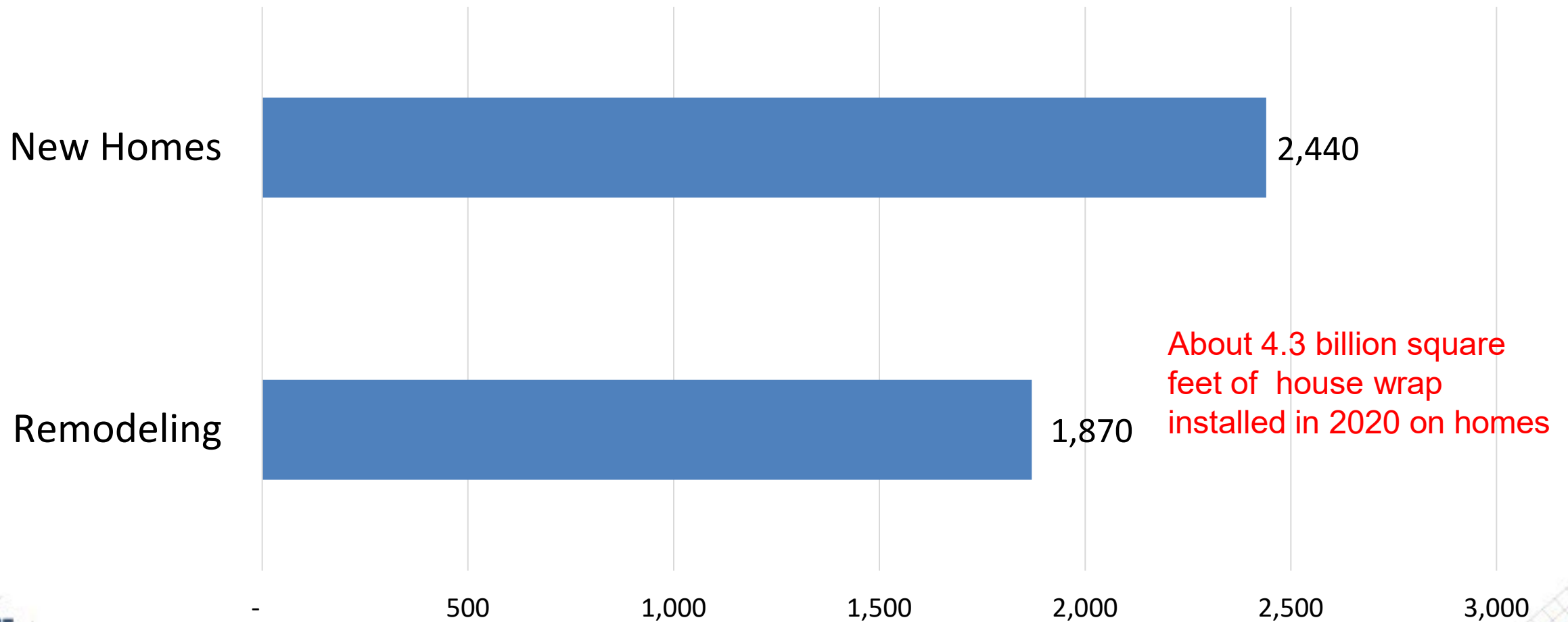
Wall Sheathing Trends in New Homes



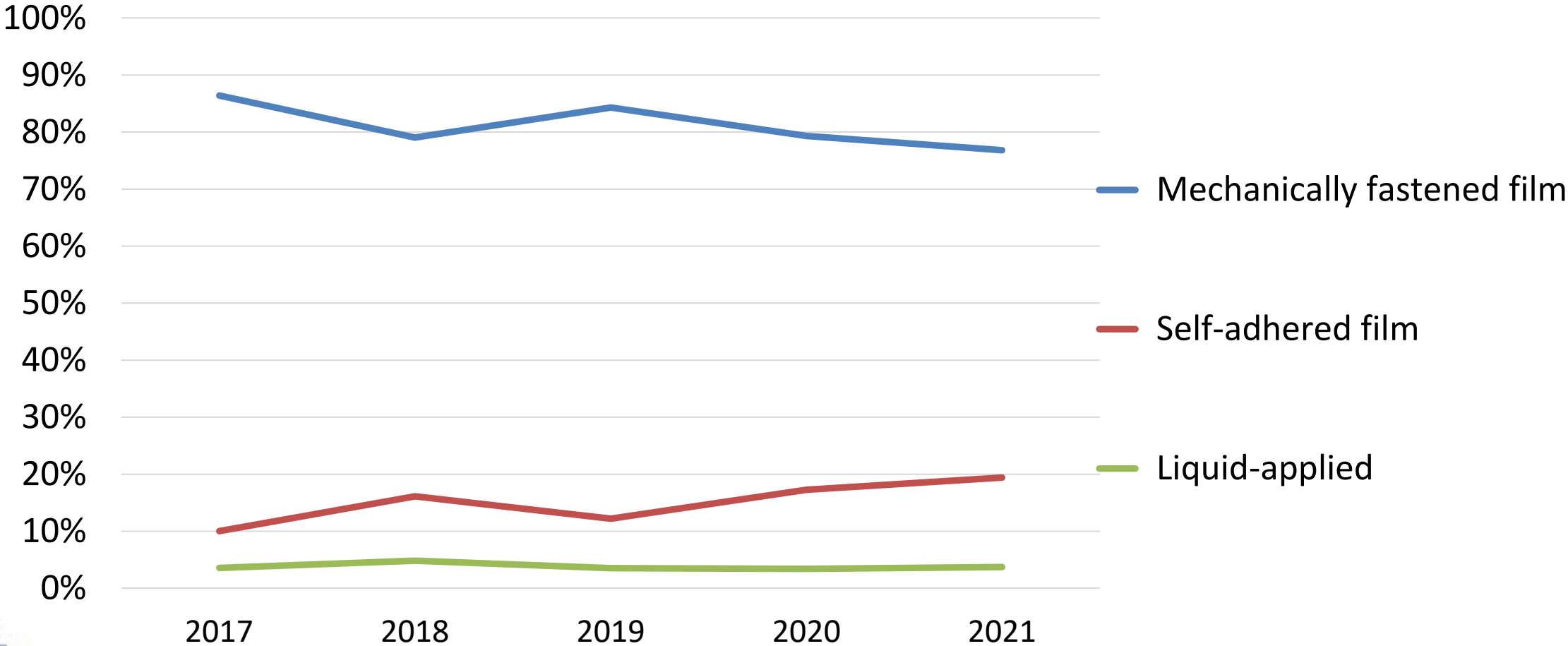
Self-sticking Residential Housewrap



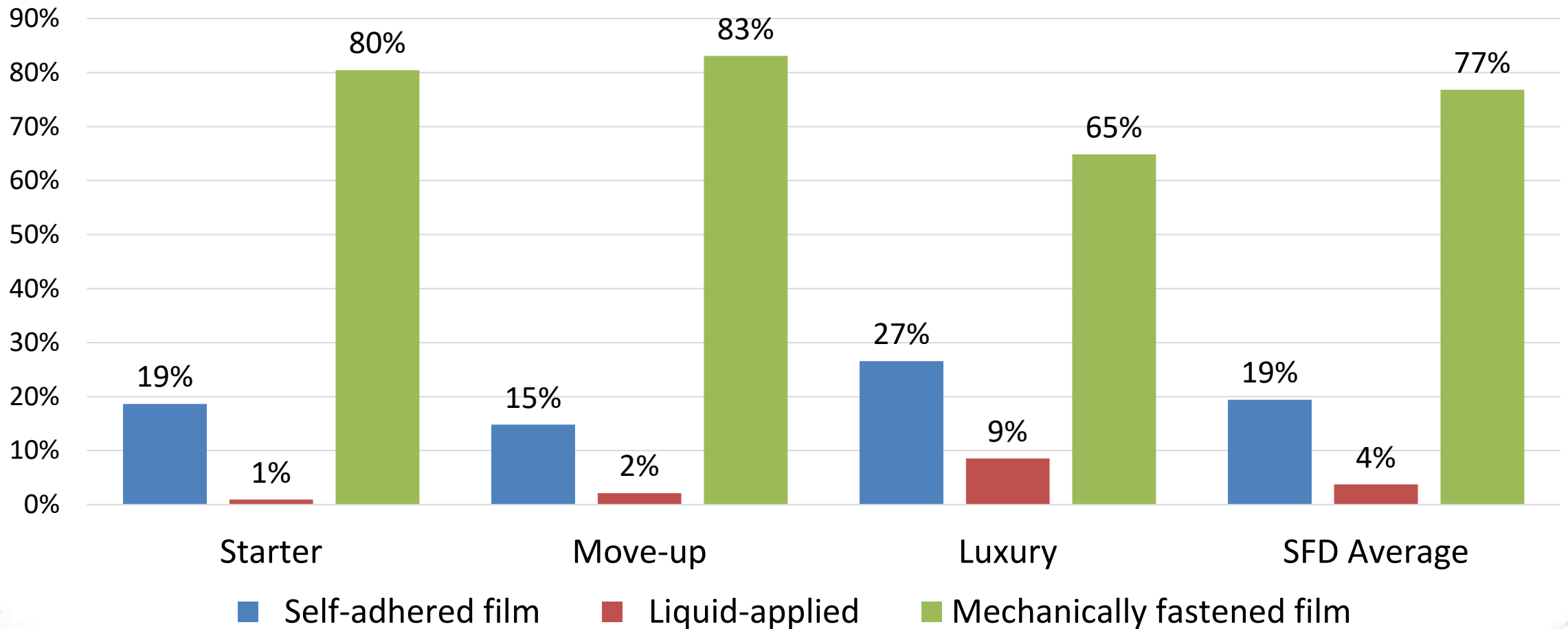
U.S. Residential Housewrap Market in 2020 (millions of SF)



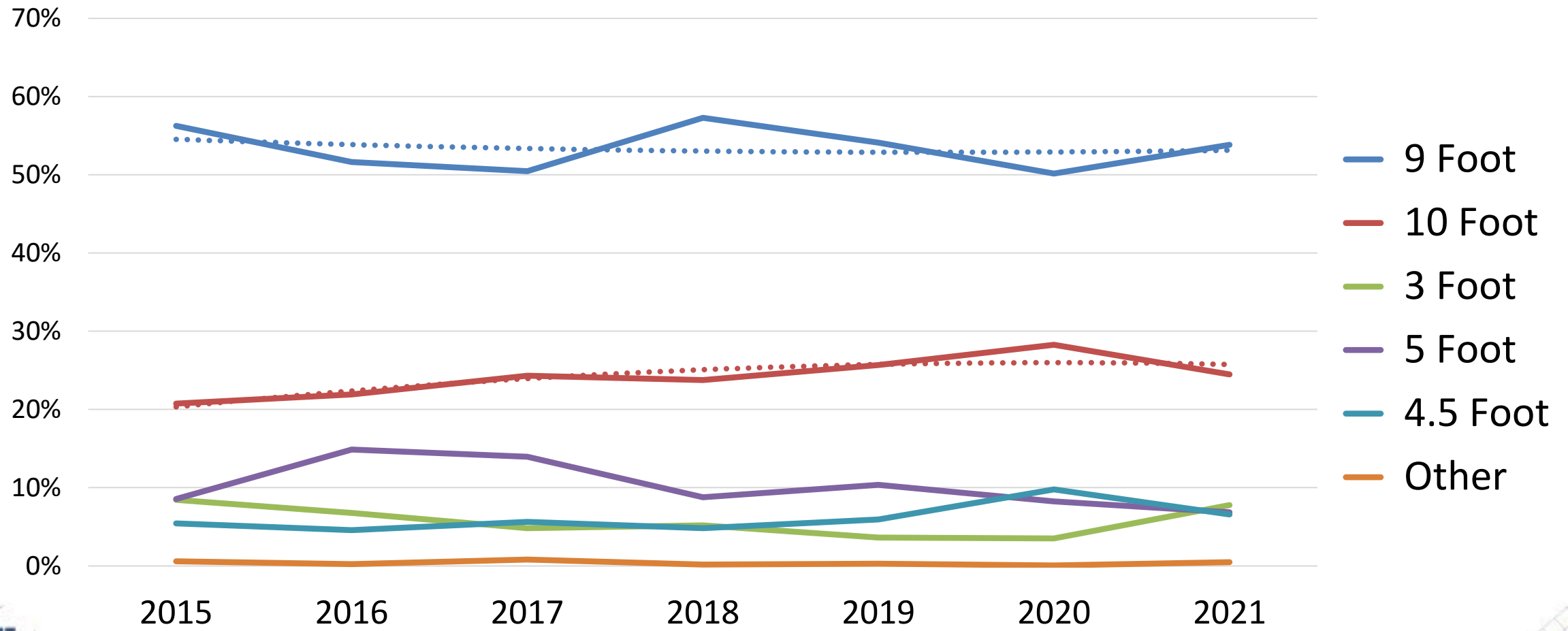
Housewrap Trends in New Homes



Housewrap Shares of U.S New Single Family Home Market: Starter, Move-Up, Luxury Homes (2020)

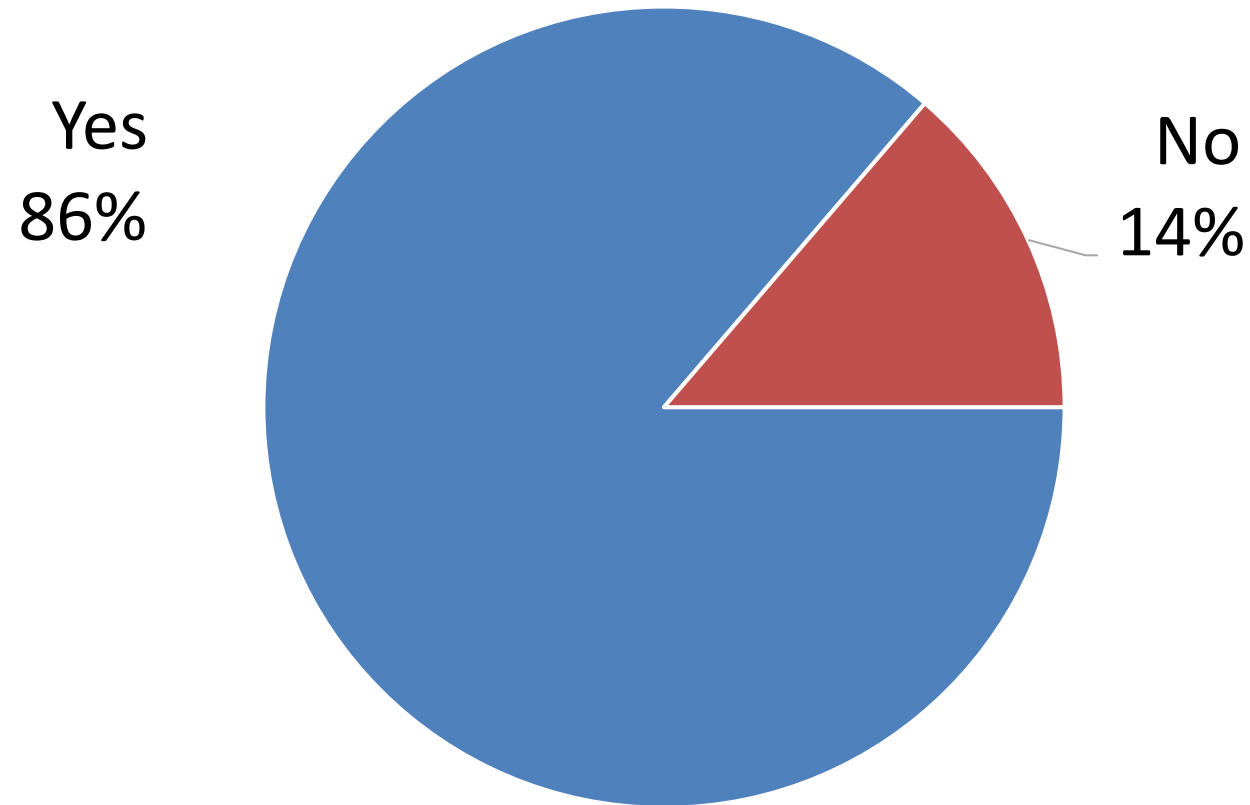


Housewrap Trends in New Homes, Size of Roll



Source: Annual Builder Practices Reports

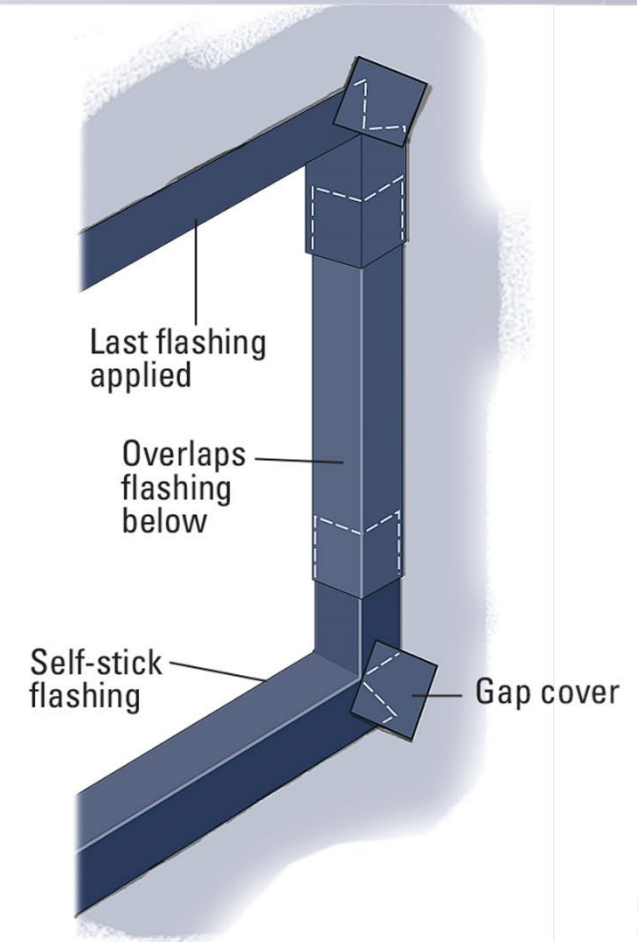
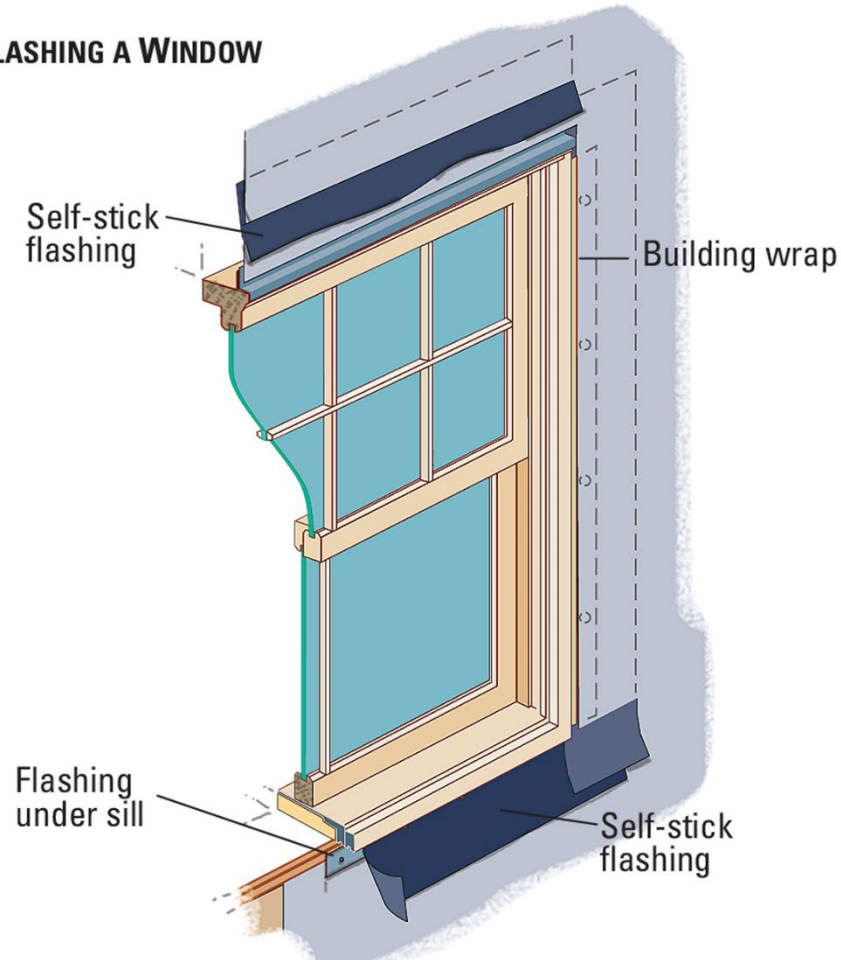
Housewrap, Installed by Professional Contractor, New Homes and Remodeling



Residential New Construction Windows and Patio Doors

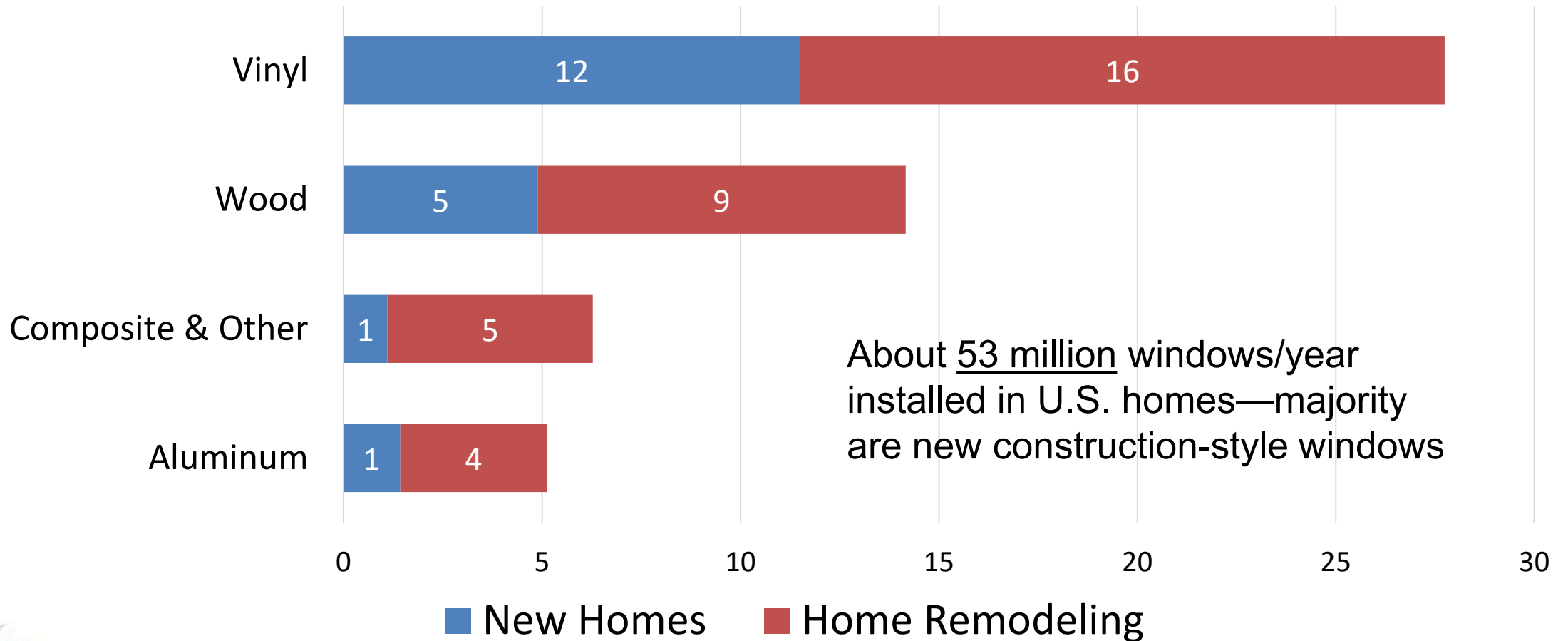
- Flashing tape is nearly universal for new construction windows and patio doors
- Placed at window head, sides, and sill
- Potential of about 750* million LF or more of window flashing tape annually

FLASHING A WINDOW



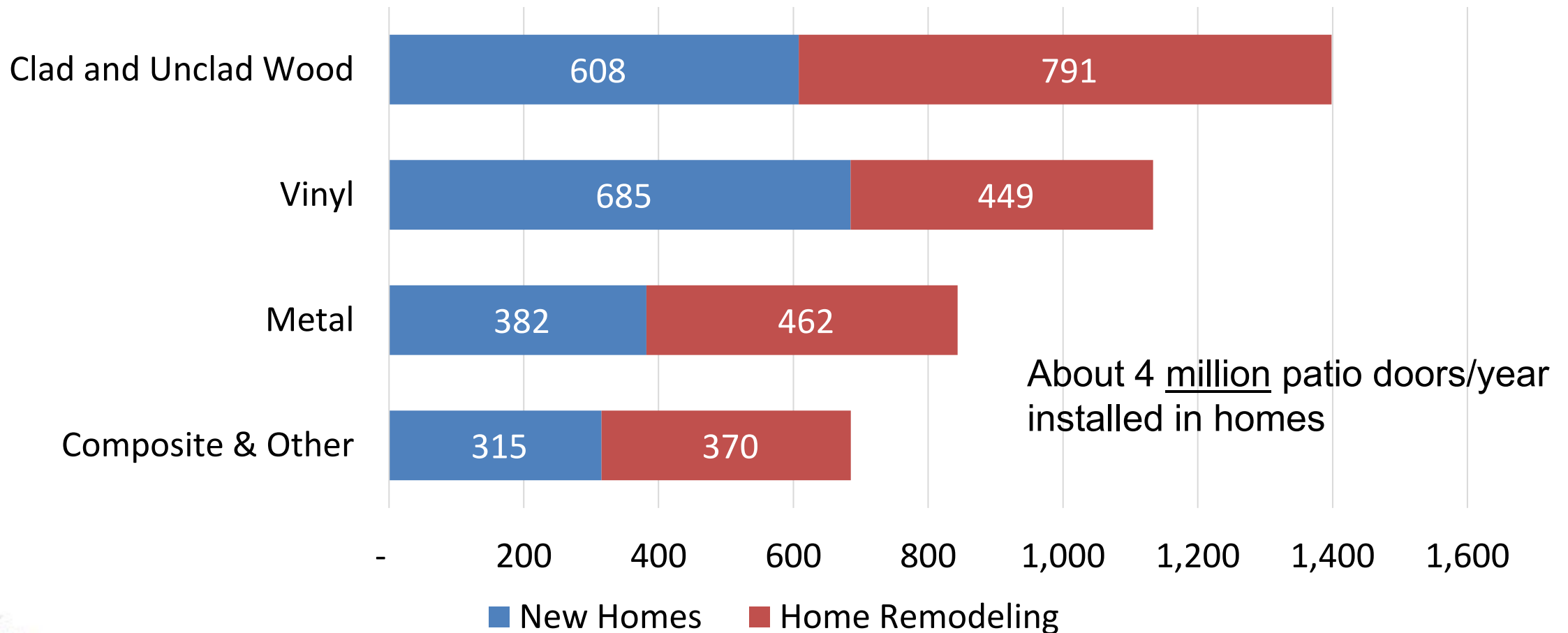
Windows Installed in New U.S. Homes and Home Remodeling, 2020

(millions of window units)



Patio Doors Installed in New U.S. Homes and Home Remodeling, 2020

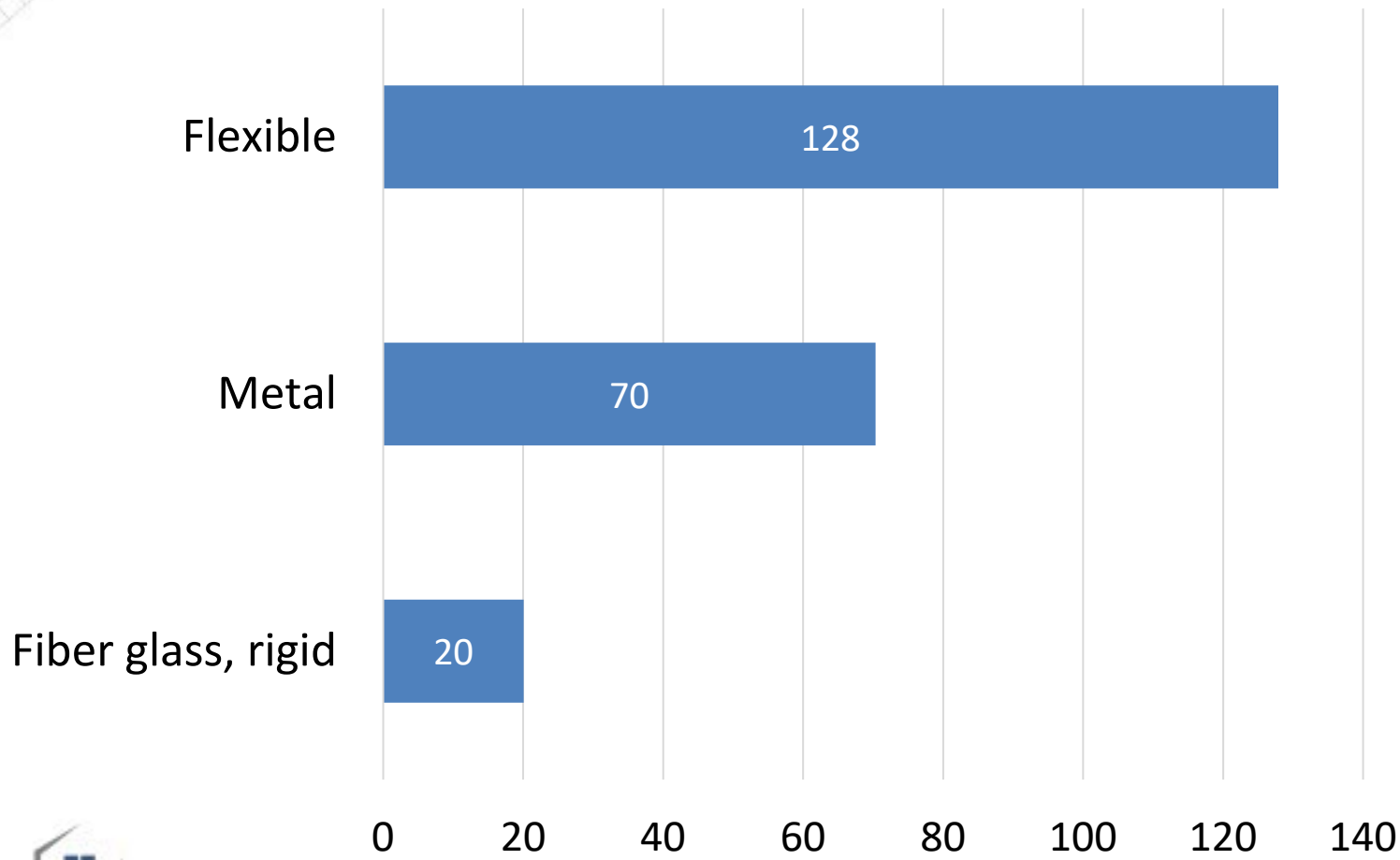
(thousands of doors)



HVAC Ducts and Equipment



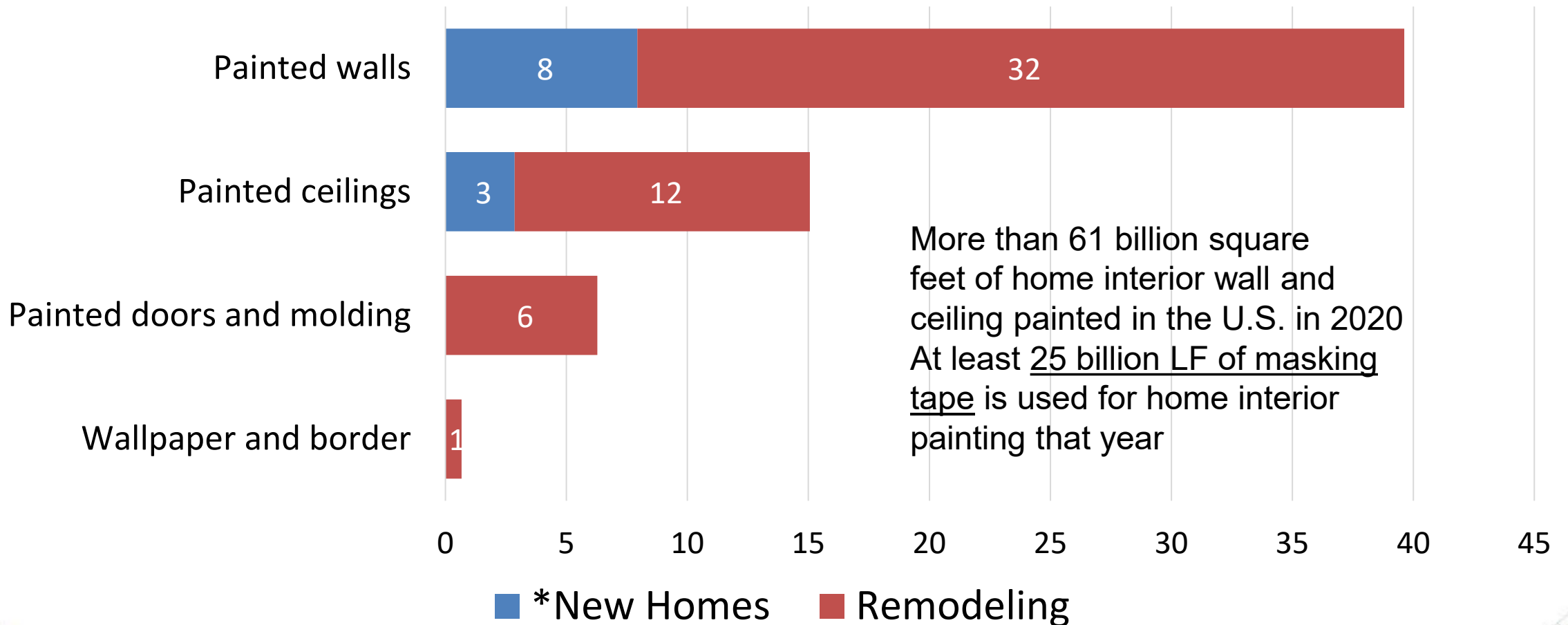
Residential HVAC Main and Run-Out Ducts Installations 2020, New Homes (millions of LF)



- 220 million linear feet of HVAC duct installed in new homes in the U.S. in 2020
- Ducts transitioning from outside to inside envelope
- Less metal, more flex duct
- Aerosol duct sealing may change market
- Potential new entrants that are self-sealing



Residential Interior Painting, 2020 (billions of SF)



More than 61 billion square feet of home interior wall and ceiling painted in the U.S. in 2020
At least 25 billion LF of masking tape is used for home interior painting that year



Summary of Opportunities in Home Construction and Remodeling

- Self-sticking resilient flooring—in home remodeling
- Self-sticking roofing underlayment—particularly in home re-roofing
- Roof sheathing tapes—particularly in high-wind areas as part of re-roofing
- Self-adhered housewrap—higher-end new homes
- Wall sheathing tape on new homes
- Flashing tapes for windows and doors
- HVAC and housewrap tape markets are mature but growth opportunity exists





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THANK YOU

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