Demographic, societal, and technological changes are on the horizon for residential building design. These influences are set to evolve multiple aspects of residential design from material selection, to layout, to environmental integration.

Demographic Influences

Two distinct groups are anticipated to have the most significant impact on residential design trends. The first group is comprised of adults aged 23-37. This group has seen an increasing number opting to stay with, or return home to their parents. This figure has steadily risen since 2000—reasons include housing affordability issues, climbing rents, greater debt burdens, and stagnate wage growth following the impacts of the Global Financial Crisis (GFC) legacy. Influences that contribute to the changing trends in household demographics involve career and lifestyle flexibility considerations as well as motivations to establish financial security.

At the other end of the spectrum, the country continues to face the impact of an ageing population. For the first time in US history, older adults are projected to outnumber children by 2034 (US Census). Driving this trend is the ageing of one of the largest generations in history - Baby Boomers. In 2030, when all boomers will be older than 65, older Americans will make up 21 percent of the population, up from 15 percent today (US Census).

Design Impact

These demographic influences are estimated to have pivotal impacts on residential design. Emerging trends include:

- **Expanded Application of Flexible Spaces:** Increasing demand for flexible spaces to accommodate the changing needs of multigenerational living. This includes the increased demand for Accessory Dwelling Units (ADUs) and blurred lines between the functions of rooms and spaces within the household. California has recently passed five new bills expanding the potential for ADUs in 2019 to meet this growing demand (Curbed.com).

- **Increased Focus on Accessible and Inclusive Homes:** This reflects building design that accommodates the needs of an evolving population, including more approachable structures for those with mobility issues and vision impairment. This focus also sees a push to improve communal space design to address some of the social issues associated with an ageing population, including loneliness and isolation. Accessibility, Universal Design and Inclusive Architecture were some of the most searched concepts on ArchDaily in 2018 with search volume for these terms up over 100% in 2018 (ArchDaily).

- **Greater Investment in Existing Building Improvement:** Household construction spending is shifting towards a focus on improvement over new construction. This trend is due to the continued reduction

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of useable prime space for new construction, and an older generation choosing to stay in their homes longer. Deferred retirement, limited stock of well-priced smaller homes, and the need for flexible mixed-use space for future generations have many opting to improve their existing home. Over the past few decades, 60% of residential construction spending has been used on building new homes, with the remaining 40% spent on improvements. This number is shifting, with the ratio anticipated to flip within the next decade (Architect Magazine).

**BROADER DESIGN INFLUENCES**

- **ENHANCED CONNECTIVITY:** In order to suit the needs of a more diverse base within the household, address future accessibility issues and improve household efficiency, housing connectivity is quickly emerged as a key trend in residential building.

- **GREEN HOME BUILDING PRIORITIZATION:** Gone are the days of simply attaching a solar panel to a roof to call it a green home. New trends reveal a focus on the total building envelope that includes the replacement cycle of building elements, minimizing consumption, and achieving structural efficiency through material selection and optimized structural design. In particular, there is a shift towards Net Zero Energy homes, where the production of renewable energy is sufficient to cover total energy consumption.

- **SELECTING ‘BETTER’ MATERIALS:** The push towards green home building has intensified the focus on the materials selected for homes and the level of transparency provided by product manufacturers. This focus includes the assessment of true life cycle impacts from cradle to grave, monitoring recycled content, identifying manufacturer sustainability commitment and granular ingredient reporting. This focus on ‘better’ materials has seen an increased resurgence in quality craftsmanship, paring superior materials with tailored workmanship to achieve long lasting and distinctive designs.

- **RESISTANCE AND DURABILITY:** Increased extreme weather conditions such as wildfires, hurricanes, snowstorms, and rain events have forced improvements in structural durability and resilience towards the elements. This push by building owners and supported by insurance companies, is focused on exterior roof and wall solutions that can offer superior water infiltration, wind uplift, snow loading or fire resistance performance properties.

- **NATURAL, AUTHENTIC FINISHES:** Warm authentic finishes have the ability to captivate homeowners and evoke a broader emotional response compared to standard, generic finishes. Building designers enjoy the greater flexibility, individual expression, distinctive designs, and ease of environmental integration that natural finishes provide. Engaging structures don’t need to clash with their environment to be distinctive. Natural, more engaging finishes are increasingly being used for this purpose.

- **SUPERIOR, DISTINCTIVE TEXTURE:** An emerging trend is the desire to engage through more than color alone. This is influencing the use of stimulating textures on exterior roof and wall surfaces. This trend has taken on many forms including the more abundant mixing of materials in home siding, such as wood, brick and metal. It also includes the use of textured, or light diffusing paints, and the selection of products designed to accentuate light and shadow.

- **OPEN SPACES:** Compartmentalized household functions formed into distinct rooms are yesterday’s residential design. The future includes living areas that integrate multiple purposes or use minimalistic and inferred design to reinforce the feeling of spaciousness. The advantage of this trend helps promote more inclusive, versatile, and engaging spaces for occupants.

**SOURCES**


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Through our interactions with homeowners and the design community, we have observed key focal areas that reflect these emerging trends.

**INCREASED PREFERENCE FOR RESIDENTIAL METAL ROOF PRODUCTS:** Despite a higher upfront cost, metal offers a durable, and responsible long term solution. Metal offers a higher recycled content compared to other popular roofing materials, can be designed to last 50+ years and offers superior storm and fire resistance.

**GROWING INTEREST IN MATERIAL INGREDIENT INFORMATION:** Customers have a growing interest in how and where our products are produced, where materials are sourced, and the ingredients our products contain.

**EXPANDING AWARENESS OF HOW METAL CAN CONTRIBUTE TO A GREEN BUILDING:** Metal can contribute to green building approval through its recyclability content and ingredient reporting. Metals high reflectivity can help reduce the ‘Heat Island Effect’ which designers seek to reduce under LEEDv4.1, and the Living Building Challenge.

**MORE FREQUENT QUESTIONS ABOUT METALS RESISTANCE:** Metal performs strongly across a number of criteria including hail resistance, fire resistance and wind uplift performance.

**QUESTIONS ABOUT ‘COOL’ COLORS AND SRI VALUES:** ‘Cool’ colors include paints with specialty pigments designed to improve heat reflection to lower building cooling costs. This is best represented in the Solar Reflectance Index (SRI), where a higher value denotes a more reflective surface. The Cool Roof Rating Council which manages SRI accreditation will soon include the assessment of wall performance as part of this expanded desire for reflectivity information.

**USING LRV FOR ENVIRONMENTAL INTEGRATION:** Light Reflectance Value (LRV) or glare can impede integration if the light reflected is too bright or apparent. Selecting certain colors, textures or matte paint finishes can address these concerns.

**PUSHING THE COLOR LIMITS:** A key advantage of metal is that it can take on almost any color. Steelscape continues to handle a broad range of custom requests and inquiries seeking to understand the possibilities with pre-painted metal.

**NEUTRAL AND NATURAL COLOR SELECTION:** There is an increasing desire for colors that complement a structure and its surrounding environment and won’t become outdated in the coming decades.

**SUPPORTING COLORS**

- **TIMELESS VERSATILE**
  - ZINC GRAY
  - MIDNIGHT BRONZE

- **TRANSPARENT EFFICIENT**
  - ZINCALUME® Plus

- **NATURAL AUTHENTIC**
  - LEGACY Vintage® Heritage
  - IRONSTONE Eternal Collection®

- **TEXTURE DEPTH**
  - SLATE GRAY Rawhide
  - SEDONA RUST

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