

Appendix C— Life Expectancy of Housing Components

The following material was developed for the National Association of Home Builders (NAHB) Economics Department based on a survey of manufacturers, trade associations, and product researchers. Many factors affect the life expectancy of housing components and need to be considered when making replacement decisions, including the quality of the components, the quality of their installation, their level of maintenance, weather and climatic conditions, and intensity of their use. Some components remain functional but become obsolete because of changing styles and tastes or because of product improvements. Note that the following life expectancy estimates are provided largely by the industries or manufacturers that make and sell the components listed.

Appliances	Life in Years
Compactors	10
Dishwashers	10
Dryers	14
Disposal	10
Freezers, compact	12
Freezers, standard	16
Microwave ovens	11
Electric ranges	17
Gas ranges	19
Gas ovens	14
Refrigerators, compact	14
Refrigerators, standard	17
Washers, automatic and compact	13
Exhaust fans	20

Source: Appliance Statistical Review, April 1990

Bathrooms	Life in Years
Cast iron bathtubs	50
Fiberglass bathtub and showers	10–15
Shower doors, average quality	25
Toilets	50

Sources: Neil Kelly Designers, Thompson House of Kitchens and Bath

Cabinetry	Life in Years
Kitchen cabinets	15–20
Medicine cabinets and bath vanities	20

Sources: Kitchen Cabinet Manufacturers Association, Neil Kelly Designers

Closet Systems	Life in Years
Closet shelves	Lifetime

Countertops	Life in Years
Laminate	10–15
Ceramic tile, high-grade installation	Lifetime
Wood/butcher block	20+
Granite	20+

Sources: AFP Associates of Western Plastics, Ceramic Tile Institute of America

Doors	Life in Years
Screen	25–50
Interior, hollow core	Less than 30
Interior, solid core	30-lifetime
Exterior, protected overhang	80–100
Exterior, unprotected and exposed	25–30
Folding	30-lifetime
Garage doors	20–50
Garage door opener	10

Sources: Wayne Dalton Corporation, National Wood Window and Door Association, Raynor Garage Doors

Electrical

	<i>Life in Years</i>
Copper wiring, copper plated, copper clad aluminum, and bare copper	100+
Armored cable (BX)	Lifetime
Conduit	Lifetime

Source: Jesse Aronstein, Engineering Consultant

Finishes Used for Waterproofing

Paint, plaster, and stucco	3–5
Sealer, silicone, and waxes	1–5

Source: Brick Institute of America

Floors

Oak or pine	Lifetime
Slate flagstone	Lifetime
Vinyl sheet or tile	20–30
Terrazzo	Lifetime
Carpeting (depends on installation, amount of traffic, and quality of carpet)	11
Marble (depends on installation, thickness of marble, and amount of traffic)	Lifetime+

Sources: Carpet and Rug Institute, Congoleum Corporation, Hardwood Plywood Manufacturers Association, Marble Institute, National Terrazzo and Mosaic Association, National Wood Flooring Association, Resilient Floor Covering Institute

Footings and Foundation

Poured footings and foundations	200
Concrete block	100
Cement	50
Waterproofing, bituminous coating	10
Termite proofing (may have shorter life in damp climates)	5

Source: WR Grace and Company

Heating Ventilation and Air Conditioning

	<i>Life in Years</i>
Central air conditioning unit (newer units should last longer)	15
Window unit	10
Air conditioner compressor	15
Humidifier	8
Electric water heater	14
Gas water heater (depends on type of water heater lining and quality of water)	11–13
Forced air furnaces, heat pump	15
Rooftop air conditioners	15
Boilers, hot water or steam (depends on quality of water)	30
Furnaces, gas- or oil-fired	18
Unit heaters, gas or electric	13
Radiant heaters, electric	10
Radiant heaters, hot water or steam	25
Baseboard systems	20
Diffusers, grilles, and registers	27
Induction and fan coil units	20
Dampers	20
Centrifugal fans	25
Axial fans	20
Ventilating roof-mounted fans	20
DX, water, and steam coils	20
Electric coils	15
Heat Exchangers, shell-and-tube	24
Molded insulation	20
Pumps, sump and well	10
Burners	21

Sources: Air Conditioning and Refrigeration Institute, Air Conditioning, Heating, and Refrigeration News, Air Movement and Control Association, American Gas Association, American Society of Gas Engineers, American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc., Safe Aire Incorporated

Home Security *Life in Years*
Appliances

Intrusion systems	14
Smoke detectors	12
Smoke/fire/intrusion systems	10

Insulation

For foundations, roofs, ceilings, walls, and floors	Lifetime
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Sources: Insulation Contractors Association of America, North American Insulation Manufacturers Association

Landscaping

Wooden decks	15
Brick and concrete patios	24
Tennis courts	10
Concrete walks	24
Gravel walks	4
Asphalt driveways	10
Swimming pools	18
Sprinkler systems	12
Fences	12

Sources: Associated Landscape Contractors of America, Irrigation Association

Masonry

Chimney, fireplace, and brick veneer	Lifetime
Brick and stone walls	100+
Stucco	Lifetime

Sources: Brick Institute of America, Architectural Components, National Association of Brick Distributors, National Stone Association

Millwork

Stairs, trim	50–100
Disappearing stairs	30–40

Paints and Stains *Life in Years*

Exterior paint on wood, brick, and aluminum	7–10
Interior wall paint (depends on the acrylic content)	5–10
Interior trim and door paint	5–10
Wallpaper	7

Sources: Finnaren and Haley, Glidden Company, The Wall Paper

Plumbing

Waste piping, cast iron	75–100
Sinks, enamel steel	5–10
Sinks, enamel cast iron	25–30
Sinks, china	25–30
Faucets, low quality	13–15
Faucets, high quality	15–20

Sources: American Concrete Pipe Association, Cast Iron Soil and Pipe Institute, Neil Kelly Designers, Thompson House of Kitchens and Baths

Roofing

Asphalt and wood shingles and shakes	15–30
Tile (depends on quality of tile and climate)	50
Slate (depends on grade)	50–100
Sheet metal (depends on gauge of metal and quality of fastening and application)	20–50+
Built-up roofing, asphalt	12–25
Built-up roofing, coal and tar	12–30
Asphalt composition shingle	15–30
Asphalt overlaid	25–35

Source: National Roofing Contractors Association

Rough Structure	<i>Life in Years</i>
Basement floor systems	Lifetime
Framing, exterior and interior walls	Lifetime

Source: NAHB Research Foundation

Shutters

Wood, interior	Lifetime
Wood, exterior (depends on weather conditions)	4–5
Vinyl plastic, exterior	7–8
Aluminum, interior	35–50
Aluminum, exterior	3–5

Sources: A.C. Shutters, Inc., Alcoa Building Products, American Heritage Shutters

Siding

Gutters and downspouts	30
Siding, wood (depends on maintenance)	10–100
Siding, steel	50–Lifetime
Siding, aluminum	20–50
Siding, vinyl	50

Sources: Alcoa Building Products, Alside, Inc., Vinyl Siding Institute

Walls and Wall Treatments

Drywall and plaster	30–70
Ceramic tile, high grade installation	Lifetime

Sources: Association of Wall and Ceiling Industries International, Ceramic Tile Institute of America

Windows

Window glazing	20
Wood casement	20–50
Aluminum and vinyl casement	20–30
Screen	25–50

Sources: Best Built Products, Optimum Window Manufacturing, Safety Glazing Certification Council, Screen Manufacturers Association