This table lists the recommended average useful life of the categories of assets that should be considered in a Capital Needs Assessment. If an observed item is not listed, it should be assigned to the most closely related category. The Standard EUL for a component type is fixed. The user may estimate the Remaining Useful Life (RUL) of any existing component independent of the Standard EUL by entering the assessed RUL in the appropriate space on the Components tab of the Excel Assessment Tool and by justifying the assessed RUL in the adjacent Comment box. When identifying an alternative to an existing component the user may specify a EUL for the alternative which differs from the Standard EUL for that component type but must enter an explanation in the Notes space on the Alternatives tab of the Tool. Each specific component assessed is given a free-form description by the needs assessor and this description is the "Component ID" or component name which may be more specific than the "Component Type", e.g. (a particular kind, size, etc. of refrigerator, not just any refrigerator).

	Numberin	g by ASTM	2018-08 0	utline]			
2 2	System Description	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
3					System Description and Observations		1 Start	
	3.1				Overall General Description			
	3.2				Site Systems			Need Category
		3.2.1	Martin Galacter		Topography			
		3.2.2			Storm Water Drainage			Need Item
			3.2.2.1		Catch basins, inlets, culverts	50	50	All items not color coded
	-		3.2.2.2		Marine or storm water bulkhead	35	35	are "Component Type"
			3.2.2.3		Earthwork, swales, drain ways, erosion controls	50	50	names.
			3.2.2.4		Storm drain lines	50	50	Υ.
			3.2.2.5		Storm water management ponds	50	50	
			3.2.2.6		Fountains, pond aerators	15	15	
2		3.2.3			Access and Egress	1001-24-17		Need Item
			3.2.3.1		Security gate - lift arm	10	10	
			3.2.3.2		Security gate - rolling gate	15	15	
		3.2.4			Paving, Curbing and Parking			Need Item
			3.2.4.1		Asphalt pavement	25	25	
			3.2.4.2		Asphalt seal coat	5	5	· · · · · · · · · · · · · · · · · · ·
			3.2.4.3		Concrete pavement	50	50	2
			3.2.4.4		Curbing, asphalt	25	25	
			3.2.4.5		Curbing, concrete	50	50	
	~		3.2.4.6		Parking, gravel surfaced	15	15	
			3.2.4.7		Permeable paving systems (brick, concrete pavers)	30	30	

This table lists the recommended average useful life of the categories of assets that should be considered in a Capital Needs Assessment. If an observed item is not listed, it should be assigned to the most closely related category. The Standard EUL for a component type is fixed. The user may estimate the Remaining Useful Life (RUL) of any existing component independent of the Standard EUL by entering the assessed RUL in the appropriate space on the Components tab of the Excel Assessment Tool and by justifying the assessed RUL in the adjacent comment box. When identifying an alternative to an existing component the user may specify a EUL for the alternative which differs from the Standard EUL for that component type but must enter an explanation in the Notes space on the Alternatives tab of the Tool. Each specific component assessed is given a free-form description by the needs assessor and this description is the "Component ID" or component name which may be more specific than the "Component Type", e.g. (a particular kind, size, etc. of refrigerator, not just any refrigerator).

Numbering by ASTM 2018-08 Outline 3 tiers of categorization: Overall System Sub-Component Elderly Need Category, Need General **Component Description** Family Description Component Description Item, Component Type 3.2.4.10 Carports, wood frame 30 30 3.2.4.11 Carports, metal frame 40 40 3.2.5 Flatwork (walks, plazas, terraces, patios) Need Item 25 3.2.5.1 Asphalt 25 3.2.5.2 Concrete 50 50 3.2.5.3 15 15 Gravel 3.2.5.4 Permeable paving (brick, concrete pavers) 30 30 3.2.6 Landscaping and Appurtenances Need Item 3.2.6.1 Fencing, chain-link 40 40 3.2.6.2 Fencing, wood picket 15 20 Fencing, wood board (=>1"x 6") 3.2.6.3 20 25 3.2.6.4 Fencing, wrought iron 60 60 25 Fencing, steel or aluminum 3.2.6.5 20 3.2.6.6 Fencing, concrete masonry unit (CMU) 30 30 3.2.6.7 Fencing, PVC 15 20 3.2.6.8 Signage, entrance/monument 25 25 3.2.6.9 Mail kiosk 15 20 3.2.6.10 Retaining walls, heavy block (50-80 lbs.) 60 60 Retaining walls, reinforced concrete masonry unit (CMU) 3.2.6.11 40 40 3.2.6.12 25 Retaining walls, treated timber 25 Storage sheds 3.2.6.13 30 30 3.2.7 **Recreational Facilities** Need Item 25 25 3271 Sport court- asphalt

Numbering by ASTM 2018-08 Outline Overall **3** tiers of categorization: System Sub-Component General Elderly **Component Description** Family Need Category, Need Description Component Description Item, Component Type 3.2.7.3 Sport court-hardwood 50 50 3.2.7.4 Tot lot (playground equipment) 15 10 3.2.7.5 Tot lot-lose ground cover 3 5 3.2.7.6 Pool deck 15 15 3.2.7.7 Pool/spa plastic liner 8 8 3.2.7.8 Pool/spa pumps and equipment 10 10 3.2.7.9 Decks-treated lumber 20 20 3.2.7.10 Decks-composite 50 50 3.2.8 **Site Utilities** 3.2.8.1 Site Utilities-Water Need Item 3.2.8.1.1 Water mains/valves 50 50 3.2.8.1.2 Water tower 50 50 3.2.8.1.3 Irrigation system 25 25 3.2.8.2 Site Utilities-Electric Need Item 3.2.8.2.1 Electric distribution center 40 40 3.2.8.2.2 Electric distribution lines 40 40 3.2.8.2.3 Transformer 30 30 3.2.8.2.4 25 25 Emergency generator 3.2.8.2.5 Solar photovoltaic panels 15 15 3.2.8.2.6 Photovoltaic Inverters 10 10 Pole mounted lights 3.2.8.2.7 25 25 3.2.8.2.8 Ground lighting 10 10 32829 10 Building mounted lighting 10

Numbering by ASTM 2018-08 Outline Overall **3** tiers of categorization: System Sub-Component General Family | Elderly Need Category, Need **Component Description** Description Component Description Item, Component Type 3.2.8.3 **Site Utilities-Gas** Need Item 3.2.8.3.1 Gas main 40 40 3.2.8.3.2 Gas supply lines 40 40 3.2.8.3.3 Site propane, storage & distribution 35 35 3.2.8.3.4 Gas lights/fire pits 20 20 3.2.8.4 **Site Utilities-Sewer** Need Item 3.2.8.4.1 Sanitary sewer lines 50 50 3.2.8.4.2 Sanitary waste treatment system 40 40 3.2.8.4.3 Lift station 50 50 3.2.8.5 Site Utilities-Trash Need Item 3.2.8.5.1 Dumpsters 15 15 3.2.8.5.2 Compactors (exterior, commercial grade) 20 20 3.2.8.5.3 Recycling containers/equipment 15 15 3.2.8.5.4 Composting, organic recycling equipment 10 10 3.3 **Building Frame & Envelope Need Category** 3.3.1 Foundation Need Item Slab, reinforced concrete 3.3.1.1 100 100 3.3.1.2 Slab, post tensioned 100 100 3.3.1.3 Continuous reinforced concrete footer and CMU stem wall 100 100 3.3.1.4 Piers, reinforced concrete footer and CMU pier 100 100 3.3.1.5 Piers, treated timber post/pole 40 40 3.3.1.6 Foundation waterproofing 40 40 3317 Foundation suction drainage groundwater radon gas controls numps

Numbering by ASTM 2018-08 Outline 3 tiers of categorization: Overall Sub-System Family Elderly Need Category, Need **Component Description** General Component Description Component Description Item, Component Type 3.3.2 **Building Frame** 3.3.2.1 Need Item Framing System, Floors & Walls 3.3.2.1.1 Wood, timbers, dimensioned lumber, laminated beams, trusses 100 100 3.3.2.1.2 75 Tie downs, clips, braces, straps, hangers, shear walls/panels 75 3.3.2.1.3 Steel, beams, trusses 100 100 3.3.2.1.4 Reinforced concrete 100 100 3.3.2.1.5 Reinforced masonry, concrete masonry units (CMUs) 100 100 3.3.2.1.6 Solid masonry (obsolete) 100 100 3.3.2.2 **Crawl Spaces, Envelope Penetrations** Need Item 3.3.2.2.1 Sealed crawl space system 40 40 3.3.2.2.2 Vents, screens, covers 30 30 Vapor Barrier (VDR) ground or underfloor 3.3.2.2.3 30 30 3.3.2.2.4 Penetrations, caulking/sealing 15 15 3.3.2.2.5 Crawl space, (de)pressurization, fans, pumps, sumps, equipment failure alarms 10 10 3.3.2.3 **Roof Frame & Sheathing** Need Item 3.3.2.3.1 Wood frame and board or plywood sheathing 75 75 3.3.2.3.2 75 Tie downs, clips, braces, straps, hangers 75 3.3.2.3.3 Steel frame and sheet metal or insulated panel sheathing 100 100 Reinforced concrete deck 100 100 3.3.2.3.4 3.3.2.4 Flashing & Moisture Protection Need Item Caulking and Sealing 3.3.2.4.1 15 15 10 10 22212 Concrete/Masonry Sealants

	Numberin	g by ASTM	2018-08 O	utline				
	System Description	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
				3.3.2.4.4	Building wraps & moisture resistant barriers	50	50	
			_	3.3.2.4.5	Paints and stains, exterior	8	8	
	14		3.3.2.5		Attics & Eaves			Need Item
			6	3.3.2.5.1	Screened gable end or soffit Vents	30	30	
				3.3.2.5.2	Roof vents, passive	40	40	
				3.3.2.5.3	Roof Vents, powered	20	20	
			3.2.2.6		Insulation			Need Item
				3.3.2.6.1	Loose fill, fiber glass, cellulose, mineral wool	50	50	
				3.3.2.6.2	Batts, blankets, rolls, fiber glass or mineral wool	60	60	
				3.3.2.6.3	Rigid foam board	60	60	
				3.3.2.6.4	Sprayed foam	60	60	
			3.3.2.7		Exterior Stairs, Rails, Balconies/Porches, Canopies		No. 1	Need Item
	e.			3.3.2.7.1	Exterior Stairs, wood frame/stringer	30	30	
				3.3.2.7.2	Exterior Stair Tread-wood	15	15	
				3.3.2.7.3	Exterior Stairs-steel frame/stringer	40	40	
	ν			3.3.2.7.4	Exterior Stair Tread-metal, concrete filled	20	20	
				3.3.2.7.5	Exterior Stairs, Concrete	50	50	
		021		3.3.2.7.6	Fire escapes, metal	50	50	
		×		3.3.2.7.7	Balcony/Porch, wood frame	25	25	
2				3.3.2.7.8	Balcony/Porch, steel frame or concrete	40	40	
				3.3.2.7.9	Balcony/Porch, wood decking	20	20	
				3.3.2.7.10	Balcony/Porch, composite decking	50	50	
				3.3.2.7.11	Railings, wood	20	20	
				227717	Pailings motal	FO	FO	

Numberin	g by ASTM	2018-08 0	utline				
System Description	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
			3.3.2.7.13	Railings, composite	50	50	
4			3.3.2.7.14	Canopy, concrete	50	50	1.
			3.3.2.7.15	Canopy, wood/metal	40	40	
		3.3.2.8		Exterior Doors & Entry Systems			Need Item
			3.3.2.8.1	Unit entry door, exterior, solid wood/metal clad	25	30	
			3.3.2.8.2	Common exterior door, aluminum and glass	30	30]
			3.3.2.8.3	Common exterior door, solid wood /metal clad	25	25	1
			3.3.2.8.4	Storm/screen doors	5	10	1
			3.3.2.8.5	Sliding glass doors	25	30	,
			3.3.2.8.6	French or atrium doors, wood/metal clad	25	30	
			3.3.2.8.7	Automatic entry doors	- 30	30	
			3.3.2.8.8	Commercial entry systems	50	50	
			3.3.2.8.9	Overhead door	30	30	
			3.3.2.8.10	Automatic opener, overhead door	20	20	
	3.3.3			Façades or Curtainwall			
		3.3.3.1		Sidewall System			Need Item
	(e)		3.3.3.1.1	Aluminum siding	40	40	
			3.3.3.1.2	Vinyl siding	25	25	
100			3.3.3.1.3	Cement board siding	45	45	
			3.3.3.1.4	Plywood/laminated panels	20	20	
			3.3.3.1.5	Exterior Insulation Finishing System (EIFS)	30	30	
			3.3.3.1.6	Stucco, over wire mesh/lath	50	50	
			33317	Metal/glass curtain Wall	40	40	

Numberin	g by ASTM	2018-08 0	utline				
System Description	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
			3.3.3.1.9	Brick/block veneer	60	60	
			3.3.3.1.10	Stone Veneer	50	50	
			3.3.3.1.11	Glass Block	50	50	
		3	3.3.3.1.12	Cedar/Redwood shakes, clapboard	50	50	
			3.3.3.1.13	Pine board, clapboard	50	50	
		3.3.3.2		Windows			Need Item
			3.3.3.2.1	Wood, (single, double hung, casement, awning, sliders)	35	45	
	~		3.3.3.2.2	Wood, fixed pane, picture	40	45	
			3.3.3.2.3	Aluminum	35	40	
			3.3.3.2.4	Vinyl	30	30	
			3.3.3.2.5	Vinyl/alum clad wood	50	50	
			3.3.3.2.6	Storm/screen windows	7	15	
4.	3.3.4			Roofing and Roof Drainage			
		3.3.4.1		Sloped Roofs	No. Caster		Need Item
			3.3.4.1.1	Asphalt shingle	20	20	
			3.3.4.1.2	Metal	50	50	
			3.3.4.1.3	Slate shingle	75	75	
			3.3.4.1.4	Clay/cementitious barrel tile	60	60	
	(2)		3.3.4.1.5	Wood shingle, cedar shakes/shingles	25	25	
		3.3.4.2		Low Slope/Flat Roofs			Need Item
			3.3.4.2.1	Low slope-built-up roof, with gravel finish	20	20	
			3.3.4.2.2	Low slope-built-up roof, no mineral or gravel finish	10	10	
			3.3.4.2.3	Low slope-adhered rubber membrane, (EPDM)	15	15	

Numbering by ASTM 2018-08 Outline Overall 3 tiers of categorization: Sub-System Component Elderly General **Component Description** Family **Need Category, Need** Description Component Description Item, Component Type 3.3.4.2.5 Low slope-rubberized/elastomeric white/cool roof 15 15 3.3.4.3 **Roof Drainage, Trim & Accessories** Need Item 3.3.4.3.1 Gutters/downspouts, aluminum 20 20 Gutters/downspouts, copper 50 3.3.4.3.2 50 3.3.4.3.3 30 Low slope-roof drains, scuppers 30 3.3.4.3.4 Soffits, wood, vinyl, metal 20 20 20 3.3.4.3.5 Fascia, wood, vinyl 20 30 30 3.3.4.3.6 Roof hatch 3.3.4.3.7 Service door 30 30 3.3.4.3.8 Roof skylight 30 30 Mech.-Elect.-Plumbing 3.4 **Need Category** 3.4.1 Plumbing 3.4.1.1 Water Supply and Waste Piping **Need Item** 3.4.1.1.1 PVC/CPVC pipe, supply and waste 75 75 75 3.4.1.1.2 75 Copper/brass hard pipe, supply 50 50 3.4.1.1.3 Copper Tube, supply 40 3.4.1.1.4 40 Galvanized pipe, supply 75 75 3.4.1.1.5 Cast iron sanitary waste 3.4.1.1.6 Domestic cold water pumps 20 20 50 3.4.1.1.7 Sewage ejectors 50 3.4.1.1.8 Commercial sump pump 20 20 Residential sump pump 15 15 3.4.1.1.9 15 341110 Water softener/filtration 15

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Numbering by ASTM 2018-08 Outline Overall **3** tiers of categorization: System Sub-General Component **Component Description** Elderly Family Need Category, Need Description Component Description Item, Component Type 3.4.1.2.1 DHW circulating pumps 15 15 DHW storage tanks 15 15 3.4.1.2.2 3.4.1.2.3 Exchanger, in tank or boiler 15 15 3.4.1.2.4 External tankless heater, gas or electric 20 20 3.4.1.2.5 20 20 Solar hot water 3.4.1.2.6 Residential hot water heater, gas or electric 12 15 3.4.1.2.7 Flue, gas water heaters 35 35 3.4.1.2.8 Boilers, oil fired, sectional 25 25 3.4.1.2.9 Boilers, gas fired, sectional 25 25 Boilers, oil/gas/dual fuel, low MBH 3.4.1.2.10 30 30 3.4.1.2.11 Boilers, oil/gas/dual fuel, high MBH 40 40 Boilers, gas fired atmospheric 25 25 3.4.1.2.12 3.4.1.2.13 Boilers, electric 20 20 Boiler blowdown and water treatment 25 25 3.4.1.2.14 3.4.1.2.15 25 25 Boiler room pipe insulation 3.4.1.2.16 Boiler room piping 50 50 3.4.1.2.17 25 Boiler room valves 25 3.4.1.2.18 Boiler temperature controls 15 15 3.4.1.2.19 Heat Exchanger 35 35 3.4.1.3 **Fixtures** Need Item 3.4.1.3.1 Faucets & valves 15 20 3.4.1.3.2 Bath tubs & sinks, cast iron 75 75 3.4.1.3.3 Bubs tubs & sinks, enameled or stainless steel, fiberglass 40 40

This table lists the recommended average useful life of the categories of assets that should be considered in a Capital Needs Assessment. If an observed item is not listed, it should be assigned to the most closely related category. The Standard EUL for a component type is fixed. The user may estimate the Remaining Useful Life (RUL) of any existing component independent of the Standard EUL by entering the assessed RUL in the appropriate space on the Components tab of the Excel Assessment Tool and by justifying the assessed RUL in the adjacent comment box. When identifying an alternative to an existing component the user may specify a EUL for the alternative which differs from the Standard EUL for that component type but must enter an explanation in the Notes space on the Alternatives tab of the Tool. Each specific component assessed is given a free-form description by the needs assessor and this description is the "Component ID" or component name which may be more specific than the "Component Type", e.g. (a particular kind, size, etc. of refrigerator, not just any refrigerator).

Numbering by ASTM 2018-08 Outline Overall **3 tiers of categorization:** System Sub-Component General Need Category, Need **Component Description** Family Elderly Description Component Description Item, Component Type 3.4.1.3.5 Toilets/bidets/urinals 40 40 3.4.1.3.6 Flush valves 10 15 3.4.1.3.7 Tub/shower units or integrated assemblies 30 30 3.4.2 **Centralized HVAC Systems** 3.4.2.1 **Centralized Heating/Cooling Equipment** Need Item Boilers, oil fired, sectional - Centralized 25 25 3.4.2.1.1 Boilers, gas fired, sectional - Centralized 3.4.2.1.2 25 25 3.4.2.1.3 Boilers, oil/ gas/dual fuel, low MBH - Centralized 30 30 3.4.2.1.4 Boilers, oil/gas/dual fuel, high MBH - Centralized 40 40 3.4.2.1.5 Boilers, gas fired atmospheric - Centralized 25 25 Boilers, electric - Centralized 3.4.2.1.6 20 20 3.4.2.1.7 Boiler blowdown and water treatment - Centralized 25 25 3.4.2.1.8 25 Boiler room pipe insulation - Centralized 25 3.4.2.1.9 Boiler room piping - Centralized 50 50 3.4.2.1.10 Boiler room valves - Centralized 25 25 3.4.2.1.11 15 Boiler temperature controls - Centralized 15 3.4.2.1.12 35 Heat exchanger - Centralized 35 3.4.2.1.13 30 30 Combustion air, duct with fixed louvers 3.4.2.1.14 Combustion air, motor louvers and duct 25 25 3.4.2.1.15 Combustion waste flue 40 40 25 3.4.2.1.16 Cooling tower 25 Chilling plant 3.4.2.1.17 20 20 342118 Steam supply station 50 50

Numberi	ng by ASTM	2018-08 0	utline				y
System Descriptior	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
		3.4.2.2		Centralized Heat/Air/Fuel Distribution		ALC: NO	Need Item
	·		3.4.2.2.1	Fuel oil/propane storage tanks	40	40	
			3.4.2.2.2	Remediate/remove abandoned tanks/fuel lines	100	100	×
			3.4.2.2.3	Fuel transfer system	25	25	
		1	3.4.2.2.4	Gas/oil distribution lines	50	50	
			3.4.2.2.5	Gas meter	40	40	
			3.4.2.2.6	2 pipe/4 pipe hydronic distribution-above grade	50	50	
			3.4.2.2.7	2 pipe/4 pipe hydronic distribution-in ground	25	25	
			3.4.2.2.8	Hydronic/water circulating pumps	20	20	
			3.4.2.2.9	Hydronic/water controller	20	20	
			3.4.2.2.10	Radiation-steam/hydronic (baseboard or freestanding radiator)	50	50	
			3.4.2.2.11	Fan coil unit, hydronic	30	30	
			3.4.2.2.12	Central exhaust fans/blowers	20	20	
	3.4.3			Decentralized and Split HVAC Systems			
		3.4.3.1		Dwelling/Common Area HVAC Equipment		1 Section	Need Item
			3.4.3.1.1	Electric heat pump, condenser, pad or rooftop	15	15	
			3.4.3.1.2	Electric AC condenser, pad or rooftop	15	15	
			3.4.3.1.3	Electric furnace/air handler	20	20	
			3.4.3.1.4	Gas furnace/air handler	20	20	
			3.4.3.1.5	Hydronic heat/electric AC air handler	25	25	
			3.4.3.1.6	Hydronic feed electric heat pump/air handler	25	25	
			3.4.3.1.7	Wall mounted electric/gas heater	25	25	
			3.4.3.1.8	Electric baseboard heater	30	30	

Numbering by ASTM 2018-08 Outline Overall **3** tiers of categorization: Sub-System Component Elderly General **Component Description** Family Need Category, Need Description Component Description Item, Component Type 3.4.3.1.10 Window or thru-wall air conditioners 10 10 3.4.3.1.11 Package HVAC roof top 15 15 Air filtration/humidity control devices (humidifiers, HRV's) 3.4.3.1.12 20 20 3.4.3.1.13 Duct, rigid sheet metal, insulated if not in conditioned space 35 35 3.4.3.1.14 Duct, flexible, insulated 20 20 3.4.3.1.15 Duct, sealing-mastic or UL 181A or 181B tape. 20 20 3.4.3.1.16 Diffusers, registers 20 20 3.4.3.1.17 Fireplace, masonry & firebrick, masonry chimney 75 75 3.4.3.1.18 Fireplace, factory assembled 35 35 3.4.3.1.19 Fireplace insert, stove 50 50 Chimneys, metal, and chimney covers 3.4.3.1.20 35 35 3.4.3.2 **HVAC Controls** Need Item 3.4.3.2.1 Dwelling/common area thermostat 15 20 3.4.3.2.2 Heat sensors 15 15 3.4.3.2.3 Outdoor temperature sensor 10 10 3.4.4 Electrical 3.4.4.1 **Electric Service & Metering** Need Item 3.4.4.1.1 Building service panel 50 50 3.4.4.1.2 Building meter 40 40 3.4.4.1.3 Tenant meters, meter panel 40 40 3.4.4.2 **Electrical Distribution** Need Item 3.4.4.2.1 Tenant electrical panel 50 50 34422 50 Unit/building wiring 50

Numbering by ASTM 2018-08 Outline **3 tiers of categorization:** Overall System Sub-Need Category, Need Component **Component Description** Family Elderly General Description Component Description Item, Component Type 3.4.4.3.1 35 35 Switches & outlets 3.4.4.3.2 Lighting - exterior entry 15 20 3.4.4.3.3 25 30 Lighting- interior common space 3.4.4.3.4 20 25 Lighting - tenant spaces 3.4.4.3.5 Door bells, chimes 20 25 3.4.4.4 **Telecommunications Equipment** Need Item 3.4.4.4.1 Satellite dishes/antennae 20 20 3.4.4.4.2 Telecom panels & controls 20 20 Telecom cabling & outlets 20 20 3.4.4.4.3 Vertical Transportation Need Category 3.5 **Elevators/Escalators** 3.5.1 Need Item 3.5.1.1 Electrical switchgear 50 50 3.5.1.2 Electrical wiring 30 30 Elevator controller, call, dispatch, emergency 3.5.1.3 10 20 3.5.1.4 10 Elevator cab, interior finish 20 Elevator cab, frame 3.5.1.5 35 50 3.5.1.6 Elevator, machinery 20 30 3.5.1.7 Elevator, shaft way doors 10 20 3.5.1.8 20 25 Elevator, shaft way hoist rails, cables, traveling 25 3.5.1.9 Elevator, shaft way hydraulic piston and leveling 20 3.5.1.10 Escalators 50 50 Need Category 3.6 Life Safety/Fire Protection Need Item 3.6.1 Sprinklers and Standpipes

CNA e-Tool Estimated Useful Life (EUL) Table

Nu	umbering	g by ASTM	2018-08 0	utline				
	System escription	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
			3.6.1.2		Fire pumps	20	20	
			3.6.1.3		Fire hose stations	50	50	
			3.6.1.4		Fire extinguishers	10	15	
		3.6.2		1.253	Alarm, Security & Emergency Systems			Need Item
			3.6.2.1		Tenant space alarm systems	10	15	
			3.6.2.2		Residential smoke detectors	5	7	
			3.6.2.3		Call station	10	15	
		~	3.6.2.4		Emergency/auxiliary generator	25	25	
			3.6.2.5		Emergency/auxiliary fuel storage tank	25	25	
			3.6.2.6		Emergency lights, illuminated signs	5	10	
			3.6.2.7		Smoke and fire detection system, central panel	15	15	
			3.6.2.8		Buzzer/intercom, central panel	20	20	
			3.6.2.9		Tenant buzzer/intercom/secured entry system	20	20	
		3.6.3			Other Systems			Need Item
			3.6.3.1		Pneumatic lines and controls	30	30	
			3.6.3.2		Auto-securing doors/entries/lock down	. 30	30	
	3.7				Interior Elements	and an and a		
		3.7.1			Interiors-Common Areas			Need Category
			3.7.1.1		Finished Walls, Ceilings, Floors			Need Item
				3.7.1.1.1	Drywall - common	35	40	
				3.7.1.1.2	Plaster - common	50	50	
				3.7.1.1.3	Paints, stains, clear finishes, interior - common	15	20	
				3.7.1.1.4	Wallpapers - common	15	20	

Numberin	g by ASTM	2018-08 Ou	utline				
System Description	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
			3.7.1.1.6	Floor tile, ceramic, natural stone - common	40	50	
			3.7.1.1.7	Concrete/masonry/terrazzo - common	75	75	
			3.7.1.1.8	Hardwood floor (3/4" strip or parquet) - common	50	50	
			3.7.1.1.9	Wood floor, laminated/veneered - common	20	25	
			3.7.1.1.10	Resilient tile or sheet floor (vinyl, linoleum) - common	15	20	
			3.7.1.1.11	Carpet - common	6	10	
			3.7.1.1.12	Acoustic tile/drop ceiling - common	15	20	~
	主要的	3.7.1.2		Millwork (doors, trim, cabinets, tops)			Need Item
			3.7.1.2.1	Interior, hollow core doors - common	20	25	
			3.7.1.2.2	Interior doors, solid core, wood, metal clad, fire rated	30	35	
			3.7.1.2.3	Door trim - common	20	30	
			3.7.1.2.4	Wall trim (base, chair rail, crown moldings) - common	30	35	
			3.7.1.2.5	Passage & lock sets - common	15	20	
		8	3.7.1.2.6	Bi-fold & sliding doors - common	15	20	
			3.7.1.2.7	Cabinets & vanities - common	20	25	
			3.7.1.2.8	Tops, granite, natural stone, engineered stone - common	50	50	
			3.7.1.2.9	Tops, solid surface, stainless steel - Common	40	50	
			3.7.1.2.10	Tops, plastic laminates, wood - common	15	25	
			3.7.1.2.11	Vanity tops, cultured marble, molded acrylic, fiber glass - common	25	35	
		3.7.1.3		Appliances			Need Item
			3.7.1.3.1	Refrigerator/freezer - common	15	15	
			3.7.1.3.2	Range, cook top, wall oven - common	20	25	
			3.7.1.3.3	Range hood - common	20	25	

Numberin	g by ASTM	2018-08 0	utline				
System Description	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
			3.7.1.3.5	Disposal (food waste) - common	7	10	
			3.7.1.3.6	Compactors (interior, residential grade) -common	7	10	
			3.7.1.3.7	Dishwasher - common	10	15	
			3.7.1.3.8	Clothes washer/dryer - common	10	15	
		3.7.1.4	C. S. Starten M.	Specialties			Need Item
			3.7.1.4.1	Interior mail facility	20	25	
			3.7.1.4.2	Common area bath accessories (towel bars, grab bars, toilet stalls, etc.)	7	12	
			3.7.1.4.3	Mirrors & medicine cabinets - common	20	25	
			3.7.1.4.4	Closet/storage specialties, shelving - common	20	25	18
		c	3.7.1.4.5	Common area interior stairs	50	50	
			3.7.1.4.6	Common area railings	15	25	
2			3.7.1.4.7	Bath/kitchen vent/exhaust fans - common	15	15	
			3.7.1.4.8	Ceiling fans - common	15	15	
			3.7.1.4.9	Window treatments, drapery rods, shades, blinds, etc common	15	25	
			3.7.1.4.10	Indoor recreation and fitness equipment	10	15	
			3.7.1.4.11	Entertainment centers, theatre projection and seating	15	25	
	3.7.2			Interiors-Dwelling Units			Need Category
		3.7.2.1		Finished walls, ceilings, floors			Need Item
2			3.7.2.1.1	Drywall	35	40	5-
			3.7.2.1.2	Plaster	50	50	
			3.7.2.1.3	Paints, stains, clear finishes, interior	10	15	
			3.7.2.1.4	Wallpapers	10	15	
				Wall tile, ceramic, glass, natural stone	30	40	

CNA e-Tool Estimated Useful Life (EUL) Table

	Numberin	g by ASTM	2018-08 0	utline				
	System Description	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
				3.7.2.1.7	Concrete/masonry/terrazzo	75	75	
			2	3.7.2.1.8	Hardwood floor (3/4" strip or parquet)	50	50	
				3.7.2.1.9	Wood floor, laminated/veneered	15	20	
				3.7.2.1.10	Resilient tile or sheet floor (vinyl, linoleum)	15	20	
				3.7.2.1.11	Carpet	6	10	
				3.7.2.1.12	Acoustic tile/drop ceiling	15	20	
			3.7.2.2		Millwork (doors, trim, cabinets, tops)			Need Item
×				3.7.2.2.1	Interior, hollow core doors	20	25	
				3.7.2.2.2	Interior doors, solid core, wood, metal clad	30	35	
				3.7.2.2.3	Door trim	20	30	
				3.7.2.2.4	Wall trim (base, chair rail, crown moldings)	25	35	
				3.7.2.2.5	Passage & lock sets	12	20	
				3.7.2.2.6	Bi-fold & sliding doors	12	20	
				3.7.2.2.7	Cabinets & vanities	20	25	
				3.7.2.2.8	Tops, granite, natural stone, engineered stone	50	50	
				3.7.2.2.9	Tops, solid surface, stainless steel	40	50	
				3.7.2.2.10	Tops, plastic laminates, wood	15	25	
				3.7.2.2.11	Vanity tops, cultured marble, molded acrylic, fiber glass	25	35	
			3.7.2.3		Appliances			Need Item
				3.7.2.3.1	Refrigerator/freezer	12	15	
				3.7.2.3.2	Range, cook top, wall oven	15	25	
				3.7.2.3.3	Range hood	15	25	
				3.7.2.3.4	Microwave	10	10	

	Numberin	g by ASTM	2018-08 0	utline				
	System Description	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
				3.7.2.3.6	Compactors (interior, residential grade)	7	10	
				3.7.2.3.7	Dishwasher	10	15	
				3.7.2.3.8	Clothes washer/dryer	10	15	
			3.7.2.4	Second Stand	Specialties			Need Item
			1	3.7.2.4.1	Bath accessories (towel bars, grab bars, etc.)	7	12	
		S		3.7.2.4.2	Mirrors & medicine cabinets	15	25	
				3.7.2.4.3	Closet/storage specialties, shelving	15	25	
				3.7.2.4.4	Interior stairs	50	50	
				3.7.2.4.5	Stair and loft railings	20	25	
				3.7.2.4.6	Bath/kitchen vent/exhaust fans	15	15	
×				3.7.2.4.7	Ceiling fans	10	15	
				3.7.2.4.8	Window treatments, drapery rods, shades, blinds, etc.	10	20	
4					Additional Considerations			Need Category
	4.1				Environmental Items (not elsewhere defined)			Need Item
		4.1.1			Environmental remediation alarms	5	5	
		4.1.2			Environmental remediation pumps & equipment	5	5	*
		4.1.3			Mold-treat-remediate	100	100	
		4.1.4			Pest control/integrated pest management plan	1	1	
	4.2		SALES OF SALES		Lead Based Paint (LBP), asbestos			Need Item
		4.2.1			LBP inspection	100	100	
		4.2.2			LBP abatement			2
			4.2.2.1		LBP encapsulation (abatement)	20	20	
			4.2.2.2		LBP removal	100	100	

Numberin	g by ASTM	2018-08 0	utline				
System Description	Overall General Description	Component	Sub- Component	Component Description	Family	Elderly	3 tiers of categorization: Need Category, Need Item, Component Type
		4.2.3.1		LBP hazard interim control	6	6	
		4.2.3.2		LBP encapsulation (interim control)	6	6	
	4.2.4			Asbestos			
		4.2.4.1		Asbestos encapsulation (abatement)	10	10	
 0		4.2.4.2		Asbestos removal	100	100	3
4.3				Commercial Tenant Improvements			Need Item
	4.3.1			Owner provided item(s) (specify)	5	5	
	4.3.2			Owner provided \$ allowance (specify)	5	5	