

UTILIZATION OF REPLACEMENT COST LESS DEPRECIATION

The *COST APPROACH* to value lends itself best to property valuation for tax purposes for two principle reasons.

1. Appraisals for ad valorem taxes generally require separate land value estimates. N.C.G.S. 105-317(a)(1) requires the following:

**“In determining the true value of land, to consider as to each tract, parcel, or lot separately listed at least its advantages and disadvantages as to location; zoning; quality of soil; waterpower; water privileges; dedication as a nature preserve; conservation or preservation agreements; mineral, quarry, or other valuable deposits; fertility; adaptability for agricultural, timber-producing, commercial, industrial, or other uses; past income; probable future income; and any other factors that may affect its value except growing crops of a seasonal or annual nature.”**

2. The cost approach can be applied to all classes of property.

The use of one approach to the exclusion of the others is contrary to the appraisal process. The better method would therefore be an integrated approach based essentially upon cost but incorporating both market comparison and income whenever feasible and appropriate.

The following cost schedules are based on a typically constructed one story frame twelve hundred square foot dwelling of average quality components and workmanship with five standard plumbing fixtures (water heater, kitchen sink and one full, 3-fixture, baths) and a central heating and cooling system.

All necessary adjustments to reflect any variance from base are also supplied.

The informed buyer is not justified in paying anything more for a property than what it would cost him to acquire an equally desirable substitute property. Likewise, the upper limit of value of most improvements is the cost of reproducing an equally desirable substitute improvement. It follows, then, that a uniform starting point for a Revaluation is to determine the Replacement Cost New of each and every improvement.

### **REPLACEMENT COST**

*Replacement Cost* is the current cost of producing an improvement of equal utility to the subject property; it may or may not be the cost of reproducing a replica property. The distinction being drawn is one between Replacement Cost, which refers to a substitute property of equal utility, as opposed to *Reproduction cost*, which refers to a substitute replica property.

The Replacement Cost of an improvement includes the total cost of construction incurred by the builder, whether preliminary to, during the course of, or after completion of its construction. Among these are materials, labor, all sub-contracts, builder's overhead and profit, architectural and engineering fees, consultation fees, survey and permit fees, legal fees, taxes, insurance and the cost of interim financing.

### **PRICING SCHEDULES**

Pricing schedules and related cost tables are included in this section to assist the appraiser in arriving at accurate estimation of Replacement Cost New. They have been developed by applying unit-in-place costs to the construction of specified hypothetical or model buildings. Application of the schedules involves the selection of the model which most nearly resembles the subject building and adjusting its price to compensate for all significant variations.

Cost adjustments for the variations which are most frequently encountered in a particular type building are included.

### **PRICING SCHEDULES AND COST TABLES**

The Pricing Schedules and Cost Tables in this manual are provided to assist the appraiser in arriving at accurate and uniform valuations. Used properly, they should prove to be an invaluable tool. Quality valuations, however, are not the product of schedules and tables themselves, but rather of the appraiser's ability to use them effectively. In order to bring this about, a thorough understanding of the make-up and the capabilities and limitations of each schedule is essential. The appraiser must know the specifications from which the base prices were derived, the composition of the prices and the proper techniques and procedures for applying the prices. What's more important, the appraiser must be able to exercise good common sense and sound judgment in selecting and using them.

It should also be noted that the schedules and tables in the manual have been developed primarily for mass appraisal and tax equalization purposes. They have, therefore, been designed to provide the appraiser with an uncomplicated, fast and effective method of arriving at an accurate estimate of replacement costs. In order to maintain simplicity in the schedules, techniques and procedures, it is often necessary to make certain compromises from a strictly technical and engineering point of view. Extensive effort has been made in developing the schedules to minimize these compromises and limit them to variables which have minimal influence on the final value of the building. The schedules have been designed to reflect actual building costs and practices. Field tests have proven them to be both accurate and reliable and when applied properly, highly effective in arriving at realistic replacement costs.

BASE REPLACEMENT COST  
FOR RESIDENTIAL PROPERTY

The base replacement cost formula has been developed using the following as base cost:

One (1) story  
Frame Exterior  
Crawl Space  
1200 square feet of living area  
One (1) bath  
Central heating and cooling

Base Cost \$77.30 per square foot.

How to calculate the value of a residential property

1. Main building square footage
2. Size adjustment from base size
3. Base rate from SOV for building use
4. Base rate \* Size adjustment
5. Total Add/Deduct
6. Adjusted base rate + add/deduct = rate for main area
7. Rate \* square footage
8. Total additions
9. Main area value + total additions = total schedule value
10. Grade
11. Total schedule value \* grade factor = replacement cost new
12. Market adjustment
13. Depreciation from SOV
14. Market adjustment \* depreciation = accrued %
15. Main building value \* accrued % = appraised value

RESIDENTIAL REPLACEMENT COST BASE RATE RANGES

**RESIDENTIAL BUILDING ADDITIONS**

<u>CODE</u>	<u>DESCRIPTION</u>	<u>RATE RANGE</u>		
		UPPER	MAIN	LOWER
AFIN	ATTIC FINISHED	\$ 8.80	\$ 8.80	
APTF	PART ATTIC FINISHED	\$ 6.00	\$ 6.00	
AUNF	ATTIC UNFINISHED	\$ 4.65	\$ 4.65	
BMTR	BASEMENT RECREATION ROOM			\$ 29.50
BMTF	BASEMENT FINISHED			\$ 41.50
BWF	BAY WINDOW FRAME	\$ 25.00	\$ 50.00	\$ 50.00
BMTU	BASEMENT UNFINISHED			\$ 19.50
BWM	BAY WINDOW MASONRY	\$ 26.50	\$ 53.00	\$ 53.00
CNPY	CANOPY ATTACHED	\$ 10.35	\$ 10.35	\$ 10.35
CPT	CARPORT	\$ 14.85	\$ 14.85	\$ 14.85
EFP	ENCLOSED FRAME PORCH	\$ 29.55	\$ 47.30	\$ 47.30
EMP	PORCH ENCLOSED MASONRY	\$ 31.30	\$ 50.10	\$ 50.10
FRAA	ADDITION FRAME	\$ 37.15	\$ 74.25	\$ 37.15
FRHS	HALF STORY FRAME	\$ 37.15	\$ 74.25	\$ 37.15
GFA	ATTACHED FRAME GARAGE		\$ 21.75	\$ 21.75
GMA	ATTACHED MASONRY GARAGE		\$ 23.25	\$ 23.25
MAHS	HALF STORY MASONRY	\$ 39.35	\$ 78.70	\$ 39.35
MASA	ADDITION MASONRY	\$ 39.35	\$ 78.70	\$ 39.35
MS	STOOP MASONRY TERR		\$ 18.45	\$ 18.45
OFP	OPEN FRAME PORCH	\$ 16.75	\$ 27.00	\$ 27.00
OHF	OVERHANG FRAME	\$ 37.15	\$ 74.25	\$ 37.15
OHM	OVERHANG MASONRY	\$ 39.35	\$ 78.70	\$ 39.35
OMP	PORCH OPEN MASONRY	\$ 19.10	\$ 28.60	\$ 28.60
PCON	PATIO CONCRETE		\$ 4.60	\$ 4.60
PMAS	PATIO MASONRY TILE STONE		\$ 11.50	\$ 11.50
SUNR	SUNROOM	\$ 22.80	\$ 45.60	\$ 45.60
URF	FRAME UTILITY ROOM	\$ 11.60	\$ 23.20	\$ 23.20
URM	MASONRY UTILITY ROOM	\$ 12.30	\$ 24.60	\$ 24.60
WDDK	WOOD DECK	\$ 15.20	\$ 15.20	\$ 15.20

**STORY HEIGHT MULTIPLIERS**

<u>STORY HEIGHT</u>	<u>MULTIPLIER</u>	<u>STORY HEIGHT</u>	<u>MULTIPLIER</u>
1.00	BASE	2.40	74% OF BASE
1.10	6% OF BASE	2.45	77% OF BASE
1.15	9% OF BASE	2.50	80% OF BASE
1.20	12% OF BASE	2.55	82% OF BASE
1.25	15% OF BASE	2.60	84% OF BASE
1.30	18% OF BASE	2.65	86% OF BASE
1.35	21% OF BASE	2.70	88% OF BASE
1.40	24% OF BASE	2.75	90% OF BASE
1.45	27% OF BASE	2.80	92% OF BASE
1.50	30% OF BASE	2.85	94% OF BASE
1.55	32% OF BASE	2.90	96% OF BASE
1.60	34% OF BASE	2.95	98% OF BASE
1.65	36% OF BASE	3.00	100% OF BASE
1.70	38% OF BASE	3.25	115% OF BASE
1.75	40% OF BASE	3.50	130% OF BASE
1.80	42% OF BASE	3.75	140% OF BASE
1.85	44% OF BASE	4.00	150% OF BASE
1.90	46% OF BASE		
1.95	48% OF BASE		
2.00	50% OF BASE		
2.05	53% OF BASE		
2.10	56% OF BASE		
2.15	59% OF BASE		
2.20	62% OF BASE		
2.25	65% OF BASE		
2.30	68% OF BASE		
2.35	71% OF BASE		

**RESIDENTIAL REPLACEMENT COST BASE RATE RANGES**

**ADDITIONS/DEDUCTIONS**

**EXTERIOR WALL MULTIPLIERS**

Frame or Equal	Base
Combination Frame and Masonry	3% of Base Rate
Brick or Masonry	6% of Base Rate

**AIR CONDITIONING**

Central Air	Base
NAC (No Air Conditioning)	- \$2.29

**ATTIC AREA**

None	Base
Unfinished	+\$6.35

**BASEMENT/FOUNDATION**

Crawl space	Base
Pier	-\$2.30
None	-\$4.60
Slab	-\$4.60
Skirting	-\$2.30
Full basement	+\$15.50
Partial basement	+\$19.50

**HEATING**

Central forced air or equal	Base
Non-central	-\$1.62
No heat	-\$3.03
Unknown (new construction)	-\$3.03

**PLUMBING**

Base equals (5 Fixtures, 1 Full bath, hot water heater and kitchen sink)	
Extra fixtures	\$1100 each
No plumbing	-\$5500

**RESIDENTIAL BUILDING - OTHER FEATURES**

<b>WOOD BURNING FIREPLACES</b>	<u>Add Per Item</u>	
	Stack and One Opening	\$3,500
	Each Additional Opening	\$1,700
<b>PREFABRICATED METAL</b>		
<b>FIREPLACES</b>	Add Per Stack	\$1,700
<b>FINISHED BASEMENT RECREATION ROOMS</b>	Refers to relatively open undivided area not necessarily finished with a quality of materials and workmanship consistent with the main living area of the dwelling	
	<u>Add Per Sq Ft of Finished Area</u>	\$10.00
	Price Includes Interior Wall Finish, Flooring Ceiling, Lighting, Normal Built - Ins	
<b>FINISHED BASEMENT LIVING AREA</b>	Refers to a divided area finished with a quality of materials and workmanship consistent with the main living area of the dwelling...such as in the lower of grade level of split-level and bi-level dwellings.	
	<u>Add Per Sq Ft of Finished Area</u>	\$22.00
	Price includes Interior Wall Finish, Flooring Ceiling, Lighting, Normal Built - Ins and Partitioning	
<b>OTHER FEATURES</b>		
	<u>Add Per Item</u>	
Elevator	2 passenger E2	\$22,500
	8 passenger E8	\$51,000
Generator	permanently affixed GN	\$4,000
Jacuzzi	JA	\$4,000
Star Lift	SL	\$7,900
Basement Garage - 1 car	BSGD1	\$1,600
Basement Garage - 2 car	BSGD2	\$2,200
Basement Garage - 3 car	BSGD3	\$2,900

## APPLYING THE PROPER GRADE FACTOR

Grading would be a relatively simple process if all buildings were built to conform to the quality grade specifications outlined above. The fact is, however, that this ideal condition does not exist. It is not unusual for any conventional building to be built incorporating construction qualities that fall between the established grade levels. The grading system in this manual has been designed in such a way as to provide the appraiser with a method for accounting for such variations by establishing intermediate grades.

If the subject building is judged to be a better or inferior quality than the actual grade levels, a grade factor of plus (+) or minus (-) should be applied, i.e., C+ would be better than a straight "C" Grade, B- poorer than a straight "B" Grade, etc.

There is very rarely any clear-cut designation of a specific grade factor. The appraiser/reviewer will generally select a range, such as C+ to B- and then weigh the various quality factors exhibited in the construction in order to select the proper factor.

*Note:* The appraiser/reviewer must exercise extreme caution not to confuse the concepts "quality" and "condition" when selecting the proper grade. This is especially applicable to an older building, wherein a deteriorated condition can have a noticeable effect on their physical appearance. A building will always retain its initial grade of construction, regardless of its existing deteriorated condition. The Quality Grade ultimately selected must reflect the original built-in quality, and the selection of that grade cannot be influenced in any way by the physical condition of the building.

### Grade Factors

X plus (+)	2.50	B Plus (+)	1.35	D Plus (+)	.85
X	2.10	B	1.26	D	.78
X Minus (-)	1.85	B Minus (-)	1.17	D Minus (-)	.70
A Plus (+)	1.67	C Plus (+)	1.08	E Plus (+)	.60
A	1.55	C	1.00	E	.50
A Minus (-)	1.45	C Minus (-)	.92	E Minus (-)	.40

## Grade X Residences

Residences are usually individually designed and are characterized by the high quality of workmanship, finishes, unique and elaborate architectural styling and treatment, finest quality materials. Superior quality interior finish and built-in features.

### FOUNDATION

Masonry walls, waterproofed, reinforced concrete footings, drain tile, interior bearing wall foundation.

### EXTERIOR WALLS

Fenestration is designed with excellent quality sash. Custom ornamentation and trim, select brick, cut stone, high quality siding, etc. are used.

### ROOF

Gable, hipped or gambrel type. Heavy wood rafters and sheathing. High quality shingles, slate, tile, wood shingles or equal cover. Copper flashing and gutters.

### FLOOR STRUCTURE

Basement 4" concrete floor with monolithic finish on gravel base. Wood or steel floor joists and subfloor on first and upper floors.

### FLOOR COVER

High quality carpet or hardwood (parquet or plank), terrazzo and vinyl ceramic or marble tile.

### INTERIOR FINISH

Interior walls are taped and painted drywall with high-grade paper or vinyl wall covering, hardwood paneling or ceramic tile. Built-in book shelving and ample cabinets, which may include such specialty cabinetry items as a cooking island, bar, desk, etc. High-quality Pullman or vanity cabinets in bathrooms and dressing areas. Ceramic tile, marble or highest quality laminated plastic countertops and splash. Ceilings are mostly painted drywall with molding and coving details and other ornamentation with some degree of intricacy in their design and/or finish. Vaulted or cathedral ceilings will usually be found in master bedrooms, dining great or family rooms, as well as entries. Raised panel hardwood veneer or enameled doors with good-quality hardware. Base, casings and moldings have tight mitered corners. Spacious walk-in closets or wardrobes with may built-in features. Large linen storage closets and pantry full shelved.

### HEATING/COOLING

A forced-air furnace/heat pump with multiple controls, large capacity with insulated ductwork to all main areas. Could possibly have electronic control system.

### PLUMBING

High-quality plumbing fixtures and piping. The fixtures can include water heater, laundry tray, tiled shower stall, toilet, bidet, lavatory, tub, tub with shower over, kitchen sink, wet bar and Jacuzzi.

### ELECTRICAL

Many well-positioned outlets and high-quality fixtures throughout. Large luminous fixtures in kitchen, bath and dressing areas. Some recessed, track and fluorescent lighting possible.

Note: These grading specifications are only guidelines for general descriptive purposes and may or may or may not be limited to the detail of the individual components.

## Grade A Residences

Residences are frequently individually designed. Constructed of excellent quality materials and workmanship, exhibiting outstanding architectural styling and treatment. Attention has been given to interior refinements and detail. Exteriors have good fenestration with custom ornamentation.

### FOUNDATION

Masonry wall, waterproofed, reinforced concrete footings, drain tile, interior bearing wall foundation.

### EXTERIOR WALLS

Fenestration is well designed with high-quality sash. Custom ornamentation and trim are used. Select brick, stone, high quality siding, etc. are used.

### ROOF

Gable, hipped or gambrel type. Wood rafters and sheathing. High quality shingles or equal cover. Copper flashing and gutters

### FLOOR STRUCTURE

Basement 4" concrete floor on gravel base. Wood or steel floor joist and subfloor on first and upper floors.

### FLOOR COVER

High-quality carpet or hardwood (parquet or plank), vinyl and ceramic tile.

### INTERIOR FINISH

Interior walls are taped and painted drywall with high-grade paper or vinyl wall covering, hardwood paneling or ceramic tile. Ample amount of cabinetry, which may include such specialty cabinetry items as a cooking island, bar, desk, etc. High-quality Pullman or vanity cabinets. Ceramic tile or highest-quality laminated plastic countertops and splash. Ceilings are mostly painted drywall, with some molding and coving details. Vaulted or cathedral ceilings will usually be found in master bedrooms and entries. Raised-panel hardwood veneer or enameled doors with good-quality hardware. Base, casing and moldings have tight mitered corners. Spacious walk-in closets or wardrobes and large line store closets.

### HEATING/COOLING

A forced-air furnace/heat pump with multiple controls, large capacity with insulated ductwork to all main areas. Could possibly have electronic control system.

### PLUMBING

High-quality plumbing fixtures and piping. The fixtures can include water heater, laundry tray, tiled shower stall, toilet, bidet, lavatory, tub, tub with shower over, kitchen sink, wet bar and Jacuzzi.

### ELECTRIAL

Many well-positioned outlets and high-quality fixtures throughout. Large luminous fixtures in kitchen, bath and dressing areas. Some recessed, track and fluorescent lighting possible.

Note: These grading specifications are only guidelines for general descriptive purposes and may or may not be limited to the detail of the individual components.

## **Grade B Residences**

Residences constructed with good quality materials and above average workmanship exhibiting pronounced architectural styling and treatment. Good quality interior finish and built-in features. Exteriors have good fenestration with ornamental materials or other refinements.

### **FOUNDATION**

Masonry or concrete block walls, concrete footings, drain tile interior bearing wall foundation.

### **EXTERIOR WALLS**

Good fenestration using good-quality sash. Some ornamental trim. Face brick, good quality siding, etc. are used.

### **ROOF**

Gable, hipped or gambrel type. Wood rafters and sheathing. Good quality shingles or other equal cover. Vinyl/metal flashing and gutters.

### **FLOOR STRUCTURE**

Basement 4" concrete floor on gravel base. Wood floor joists and subfloor on first and upper floors.

### **FLOOR COVER**

Good quality carpet, hardwood and vinyl are used.

### **INTERIOR FINISH**

Interior walls are taped and painted drywall with some good quality wallpaper or wood paneling. Kitchen and baths have enamel-painted walls and ceilings. An ample amount of cabinetry with natural wood-veneer finish is used in the kitchen, with a large Pullman or vanity in the bath areas. Countertops and splash are laminated plastic, ceramic tile or simulated marble. Ceilings are painted drywall. Some small areas i.e., entries or foyers, may have low core with attractive hardware. Baseboard and casings are hardwood or softwood and have mitered corners. Walk-in closets or large sliding door wardrobes. Ample linen and storage closets. Workmanship throughout is of good quality.

### **HEATING & COOLING**

A forced-air furnace/heat pump with adequate output and ductwork to all main areas.

### **PLUMBING**

Good quality fixtures and piping. The fixtures can include any of the following water heater, laundry tray, tile or modular fiberglass shower stall, toilet, lavatory, tub, tub with shower over, kitchen sink.

### **ELECTRICAL**

A good amount of convenience outlets. Luminous fixtures in kitchen and bath areas. Some recessed, track and fluorescent lighting possible.

Note: These grading specifications are only guidelines for general descriptive purposes and may or may not be limited to the detail of the individual components.

## Grade C Residences

Residences constructed of average quality materials and workmanship, exhibiting moderate architectural styling and treatment and having a minimal amount of built-in features. Architectural design will include ample fenestration and some ornamentation on the front elevation. Average quality interior finish. Typical tract built homes would normally fall in this classification.

### FOUNDATION

Masonry or concrete block walls, concrete footings, interior bearing wall foundation.

### EXTERIOR WALLS

Standard aluminum sash or wood sash is typical of the fenestration at average quality. Face brick, average quality siding, etc. are used.

### ROOF

Gable or hipped type. Rafters or prefabricated trusses with exterior-grade plywood or wood sheathing with a medium-weight composition shingles. Vinyl/metal flashing and gutters.

### FLOOR STRUCTURE

Basement 4" concrete floor on compacted earth. Wood structure and subfloor on first and upper floors.

### INTERIOR FINISH

Interior walls are taped and painted drywall with an allowance for some inexpensive wallpaper or paneling. Kitchen and baths have enamel painted walls and ceilings. Prefinished plywood cabinets in the kitchen with a small Pullman or vanity in bath areas. Countertops are laminated plastic or ceramic tile. Doors are medium grade, hollow core with standard-grade hardwood. Baseboard and casings are stock. An adequate amount of closet space. Workmanship throughout is of average quality.

### HEATING & COOLING

A forced-air furnace/heat pump with adequate output and ductwork.

### PLUMBING

Average quality fixtures and piping. The fixtures can include any of the following: water heater, laundry tray, tile or modular fiberglass show stall, toilet, lavatory, tub, tub with show over and kitchen sink.

### ELECTRICAL

An adequate number of outlets with some luminous fixtures in kitchen and bath areas.

Note: These grading specifications are only guidelines for general descriptive purposes and may or may not be limited to the detail of the individual components.

## **Grade D Residences**

Residences constructed of fair quality materials and workmanship, generally lacking architectural styling and treatment and having only a scant amount of built-in features. Interior finish is plain with few refinements.

### **FOUNDATION**

Concrete block walls, concrete footing or piers.

### **EXTERIOR WALLS**

Moderate fenestration with inexpensive sash is typical. Front elevation may have inexpensive trim. Face brick, economy quality siding, etc. are used.

### **ROOF**

Gable or hipped type. Rafters or prefabricated trusses with plywood or other inexpensive sheathing with lightweight composition shingles. Roof slope is usually less than 4 in 12 with a minimal eave.

### **FLOOR STRUCTURE**

Basement 3" concrete floor on compacted earth. Wood structure and subfloor on first and upper floors.

### **FLOOR COVER**

Economy quality carpet, asphalt or vinyl composition tile floor cover is used.

### **INTERIOR FINISH**

Interior walls are taped and painted drywall with enamel painted walls and ceilings and kitchen and baths. Inexpensive stock cabinets of paint-grade wood or vinyl veneer in kitchen with a small Pullman or vanity in bath. Countertops are laminated plastic with a small splash. Stock, hollow core doors with inexpensive hardware. Minimal amount of closet space.

### **HEATING & COOLING**

A forced-air furnace with minimum output and ductwork. May or may not have central cooling system.

### **PLUMBING**

Inexpensive quality fixtures and piping. The fixtures can include any of the follow: water heater, laundry tray, plastic modular stall shower, toilet, lavatory, tub, tub with shower over or kitchen sink.

### **ELECTRICAL**

A minimum number of outlets and lighting fixtures.

Note: These grading specifications are only guidelines for general descriptive purposes and may or may not be limited to the detail of the individual components.

## **Grade E Residences**

Residences constructed of low-cost, quality materials and poor workmanship, void of any architectural treatment and built-in features. Architectural design is concerned with function, not appearance. Interior and exterior finished are plain and inexpensive with little or no attention to detail.

### **FOUNDATION**

Concrete block walls or piers. Concrete footings.

### **EXTERIOR WALLS**

Minimum fenestration with inexpensive sash with little or no trims. Low cost sidings are used.

### **ROOF**

Gable or shed type. Rafters or prefabricated trusses with plywood or other inexpensive sheathing with lightweight composition shingle. No cornice or gutters.

### **FLOOR STRUCTURE**

Basement 3" concrete on earth. Wood structure and subfloor on first and upper floors.

### **FLOOR COVER**

Low grade carpet and asphalt or vinyl composition tile is used.

### **INTERIOR FINISH**

Walls are inexpensive taped drywall with paint or textured finish. Kitchen and baths may have enamel painted ceilings and walls. Cabinets are paint-grade wood or vinyl veneer with low-cost laminated plastic countertops. Doors are hollow core with low-cost hardwood. Minimum amount of closet space.

### **HEATING & COOLING**

Minimum heat. May or may not have forced-air furnace. No central cooling system.

### **PLUMBING**

Low-cost inexpensive fixtures and piping. The fixtures can include any of the following: water heater, modular plastic shower stall, toilet, lavatory, tub, tub with shower over, or kitchen sink.

### **ELECTRICAL**

A minimum number of outlets and low-cost lighting.

Note: These grading specifications are only guidelines for general descriptive purposes and or may not be limited to the detail of the individual components.

---

## ***MANUFACTURED HOUSING***

### **MANUFACTURED HOUSING**

Manufactured housing can be single wide mobile homes, double wide mobile homes, or modular homes. These structures are designed with a steel undercarriage and wheel assemblies for transporting to the site. Modular homes have wood joists rather than a steel undercarriage. N.C.G.S. 105-273(13), in defining real property, provides for inclusion of manufactured housing as follows:

“Real property,’ ‘real estate,’ and ‘land’ mean not only the land itself, but also buildings, structures, improvements and permanent fixtures thereon and all rights and privileges belonging on in any wise appertaining thereto. These terms also mean a manufactured home as defined in G.S. 143-143.9(6) if it is a residential structure; has the moving hitch, wheels and axles removed; and is placed upon a permanent foundation either on land owned by the owner of the manufactured home or on land in which the owner of the manufactured home has a leasehold interest pursuant to a lease with a primary term of at least 20 years for the real property on which the manufactured home is affixed and where the lease expressly provides for a disposition of the manufactured home upon termination of the lease. A manufactured home as defined in G.S. 143-143.9(6) that does not meet all of these conditions is considered tangible personal property.

The following guidelines should be used when estimating replacement cost:

On manufactured homes, the wheel and hitch assemblies are usually removed at the building site location. The hitch is not included in the overall dimensions when calculating the actual square footage.

Manufactured homes built in the USA after June 15, 1976, must meet Federal Standards outlined in Title VI, Housing and Community Development Act of 1974. A HUD seal certifying these standards must be displayed on each unit. This section will be used for the purpose of appraising replacement cost for those built prior to its enactment, as well as those built after 1976.

### **COST**

Factory-produced homes consist of single or multi wide units, eight feet or greater in width and at least thirty-two feet or greater in length. These units are transported on their own wheel assemblies to the building site. The units are then set up on a permanent or semi-permanent foundation with utilities attached. Utilities such as water, electricity, sewer or septic tank are included in the building site (land) cost, not the factory home cost.

Manufactured homes are usually described in terms of length and width (12 x 60, 14 x 74, 24 x 52, 28 x 66, etc.) and are priced accordingly. Although most units are sold furnished, furnishings and appliances are not included in the base rate schedules for tax purposes.

Items such as wood decks, stoops, porches, patios etc. are add-ons and are valued accordingly to the schedule in the followings pages.

There has been a separate depreciation schedule developed for manufactured homes.

### **What is considered a permanent foundation?**

The Department of Insurance has issued building codes for installation of manufactured homes. The only foundation required by the building code for a manufactured home is footings and piers. The footings are either of the poured concrete type or a pre-cast solid concrete pad. The size and depth of the footing depends on the type of home and the location of the home. The Building Code states that "The bottom of all footings shall be below the frost line on a minimum of 4 inches below finished grade, whichever is greater." The frost lines vary across the state and there is a chart in the Building Code which shows the frost line by County. The piers are either single stacked or double stacked. The number and placement of the piers are dictated by the Building Code. It is our opinion that all manufactured homes have a permanent foundation if their installation is in compliance with the Building Code. The North Carolina Building Code for manufactured home can be found at:

[www.ncdoi.com/osfmdocuments/manufacturedbuilding/mhcode.pdf](http://www.ncdoi.com/osfmdocuments/manufacturedbuilding/mhcode.pdf)

Under G.S. 105-273(13) only those doublewides which meet the four criteria listed in the definition can be assessed as real property. All other doublewides are personal property. This does not mean that the value has to change on these units but that the property is treated as personal property from a listing, appraising, assessing and collection standpoint. All doublewides on leased land or located on the land of another must be considered personal property. While the law does not require that all personal property be appraised each year, there is no requirement that units listed as personal property must have a change assessed valuation each year. While it can be reasonably expected that values might change, given the lack of sales data available for personal property, it can be argued that the change is not so easily measurable over a one or two-year period. The value of these homes carried as personal property must be reviewed each year and changes made if dictated by the market. All doublewides will be assessed using the latest adopted Schedule of Values.

### **APPLYING THE PROPER MARKET ADJUSTMENTS**

Architectural fees, material quantities, labor efficiency and other factors influencing total construction costs may vary considerably from one building to another, depending upon its particular design. Two dwellings, for instance, showing no marked difference in size and quality may still show a measurable difference in cost, attributable primarily to a difference in design.

In computing the replacement cost of any building, therefore, it is necessary to adjust the cost to account for any features varying significantly from the base specifications from which the pricing schedules were developed.

The pricing schedules included in this manual, unless otherwise specified have been developed to reflect perimeter-to-area wall ratios of rectangular shaped buildings, uniform eave lines and roof slopes, overhangs, ceiling heights and other architectural features most typical of conventional designs.

The adjustments for variations in design must be made by applying a Market Adjustment denoting a percentage increase or decrease adjustment of the sub-total replacement cost, i.e., apply a +5% to indicate a 5% increase in the replacement cost, apply a -10% to indicate a 10% decrease, etc.

The Market Adjustments applicable to dwellings will normally range from 0 to 25%. However, the Market Adjustments applicable to special architectural designs may range considerably higher. The selection of the property Market Adjustment is largely a product of the experience and sound judgment of the appraiser, who must have the ability to analyze various construction components and determine the influence of each upon the overall cost.

## MARKET ADJUSTMENTS

<u>Description</u>	<u>Code</u>	<u>Sign</u>	<u>Range</u>
Architectural Style	AS	+ -	5% - 50%
Economic Condition	EC	-	5% - 50%
Multi-Family	ED	-	3% - 25%
Functional Depreciation	FD	-	5% - 50%
Location Factor	LD	+ -	3% - 25%
Protected Corridor	PC	-	50%

## EXAMPLES OF MARKET ADJUSTMENTS

Architectural Style – extraordinary for the quality of construction

Economic Condition – conditions from outside the property which are considered detrimental to the property value.

Multi-Family – consideration for common/party wall. A single wall used by two buildings or two sections of a single building.

Functional Depreciation – any internal factor which prohibits the utilization of the property to its fullest extent.

This factor is reserved for appraiser’s discretion.

Location Factor – considers the location (negative or positive) to compensate for value difference not attributable to the cost approach.

Protected Corridor – GS105-277.9A

Real property on which a building or other structure is located and that lies within a transportation corridor marked on an official map filed under Article 2E of Chapter 136 of the General Statutes is designated a special class of property under Section 2(2) of Article V of the North Carolina Constitution and is taxable at fifty percent (50%) of the appraised value of the property if the property has not been subdivided, as defined in G.S. 153A-335 or G.S. 160A-376, since it was included in the corridor.

## X GRADE RESIDENTIAL



## **X GRADE RESIDENTIAL**



## X GRADE RESIDENTIAL



## A GRADE RESIDENTIAL



## A GRADE RESIDENTIAL



## A GRADE RESIDENTIAL



## A GRADE RESIDENTIAL



## A GRADE RESIDENTIAL



## A GRADE RESIDENTIAL



## A GRADE RESIDENTIAL



## **A GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## **B GRADE RESIDENTIAL**



## C GRADE RESIDENTIAL



## C GRADE RESIDENTIAL



## C GRADE RESIDENTIAL



## C GRADE RESIDENTIAL



## C GRADE RESIDENTIAL



## C GRADE RESIDENTIAL



## C GRADE RESIDENTIAL



## C GRADE RESIDENTIAL



## C GRADE RESIDENTIAL



## C GRADE RESIDENTIAL



## D GRADE RESIDENTIAL



## D GRADE RESIDENTIAL



## D GRADE RESIDENTIAL



## D GRADE RESIDENTIAL



## D GRADE RESIDENTIAL



## D GRADE RESIDENTIAL



## D GRADE RESIDENTIAL



## D GRADE RESIDENTIAL



## E GRADE RESIDENTIAL



## E GRADE RESIDENTIAL



## **E GRADE RESIDENTIAL**





## Depreciation

Depreciation is a loss of utility and hence value from any cause. An effect caused by deterioration and/or obsolescence. Deterioration or physical depreciation is evidenced by wear and tear, decay, dry rot, cracks, encrustations, or structural defects. Obsolescence is divisible into two parts, functional and external. Functional obsolescence may be due to poor plan, mechanical inadequacy or over adequacy, functional inadequacy over adequacy due to size, style, age, etc. It is evidenced by conditions within the property. External obsolescence is caused by changes external to the property.

Depreciation begins upon construction of the improvements; they immediately begin to age physically and to suffer from functional obsolescence in their design. Negative environmental forces cause immediate external obsolescence.

When the improvements are constructed their economic life begins. During this period, they should contribute value to the property. If they are the “perfect improvement”, the amount of value they contribute would be their total cost. Since few, if any, perfect improvements are constructed, a difference exists between their total cost and their value, which represents some form of depreciation.

Generally, if the house is of average condition and design and conforms to the other houses in a neighborhood that is not subject to unusual economic influences, its effective age and chronological age will be about the same. If the house has had better than average maintenance, rehabilitation or modernization, its effective age probably will be less than its chronological age.

If it is in poorer condition than typical houses of the same age or has not been modernized or rehabilitated as other similar houses in the neighborhood, or if some off-site economic or environmental factor is negatively affecting the value, the effective age will be greater than the chronological age.

Accrued depreciation may be estimated directly through observation and analysis of the components of depreciation affecting the property or through use of a formula based on physical or economic age-life factors. It may be estimated indirectly by use of the income or market data approaches.

Three techniques are used by appraiser to measure depreciation:

1. The breakdown method separates charges in the basis of origin for cause of loss (physical deterioration, curable and incurable; functional obsolescence, curable and incurable; and external obsolescence). Each component is estimated separately, using the engineering method of observation techniques.
2. The age-life method is accomplished by estimating the typical economic life of the Improvements and their effective age.
3. The abstraction or market method extracts depreciation directly from the market.

For the purpose of this manual, all three techniques have been considered producing an overall condition, desirability and degree of usefulness of each structure.

<b>DEPRECIATION PERCENT GOOD TABLE RATING GUIDE</b>	
EXCELLENT	BUILDING IS IN PERFECT CONDITION; VERY ATTRACTIVE AND HIGHLY DESIRABLE.
VERY GOOD	SLIGHT EVIDENCE OF DETERIORATION; STILL ATTRACTIVE AND QUITE DESIRABLE.
GOOD	MINOR DETERIORATION VISIBLE; SLIGHTLY LESS ATTRACTIVE AND DESIRABLE, BUT USEFUL.
AVERAGE	NORMAL WEAR AND TEAR IS APPARENT; AVERAGE ATTRACTIVENESS AND DESIRABILITY.
FAIR	MARKED DETERIORATION - BUT QUITE USABLE; RATHER UNATTRACTIVE AND UNDESIRABLE.
POOR	DEFINITE DETERIORATION IS OBVIOUS; DEFINITELY UNDESIRABLE AND BARELY USABLE.
VERY POOR	CONDITION APPROACHES UNSOUNDNESS; EXTREMELY UNDESIRABLE AND BARELY USABLE.
UNSOUND	BUILDING IS DEFINITELY UNSOUND AND PRACTICALLY UNFIT FOR RESIDENTIAL USE. COULD POSSIBLY BE USED FOR STORAGE.

Residential 60-Year depreciation										
Economic Life	Eff Year	Eff Age	Excel	Very good	Good	Average	Fair	Poor	Very Poor	Unsound
60	2014	0	100.00	100.00	97.00	95.00	90.00	80.00	70.00	5.00
60	2013	1	100.00	100.00	97.00	95.00	90.00	80.00	70.00	5.00
60	2012	2	100.00	100.00	97.00	95.00	90.00	80.00	70.00	5.00
60	2011	3	100.00	100.00	97.00	95.00	90.00	80.00	70.00	5.00
60	2010	4	100.00	98.00	96.00	93.00	88.00	78.00	68.00	5.00
60	2009	5	100.00	98.00	96.00	93.00	88.00	78.00	68.00	5.00
60	2008	6	100.00	98.00	96.00	93.00	88.00	78.00	68.00	5.00
60	2007	7	100.00	97.00	95.00	90.00	85.00	75.00	65.00	5.00
60	2006	8	100.00	97.00	95.00	90.00	85.00	75.00	65.00	5.00
60	2005	9	100.00	97.00	95.00	90.00	85.00	75.00	65.00	5.00
60	2004	10	100.00	97.00	95.00	90.00	85.00	75.00	65.00	5.00
60	2003	11	97.00	95.00	90.00	85.00	80.00	70.00	60.00	5.00
60	2002	12	97.00	95.00	90.00	85.00	80.00	70.00	60.00	5.00
60	2001	13	97.00	95.00	90.00	85.00	80.00	70.00	60.00	5.00
60	2000	14	97.00	95.00	90.00	85.00	80.00	70.00	60.00	5.00
60	1999	15	97.00	95.00	90.00	85.00	80.00	70.00	60.00	5.00
60	1998	16	95.00	90.00	85.00	80.00	75.00	65.00	55.00	5.00
60	1997	17	95.00	90.00	85.00	80.00	75.00	65.00	55.00	5.00
60	1996	18	95.00	90.00	85.00	80.00	75.00	65.00	55.00	5.00
60	1995	19	95.00	90.00	85.00	80.00	75.00	65.00	55.00	5.00
60	1994	20	95.00	90.00	85.00	80.00	75.00	65.00	55.00	5.00
60	1993	21	90.00	85.00	80.00	75.00	70.00	60.00	50.00	5.00
60	1992	22	90.00	85.00	80.00	75.00	70.00	60.00	50.00	5.00
60	1991	23	90.00	85.00	80.00	75.00	70.00	60.00	50.00	5.00
60	1990	24	90.00	85.00	80.00	75.00	70.00	60.00	50.00	5.00
60	1989	25	90.00	85.00	80.00	75.00	70.00	60.00	50.00	5.00
60	1988	26	85.00	80.00	75.00	70.00	65.00	55.00	45.00	5.00
60	1987	27	85.00	80.00	75.00	70.00	65.00	55.00	45.00	5.00
60	1986	28	85.00	80.00	75.00	70.00	65.00	55.00	45.00	5.00
60	1985	29	85.00	80.00	75.00	70.00	65.00	55.00	45.00	5.00
60	1984	30	85.00	80.00	75.00	70.00	65.00	55.00	45.00	5.00
60	1983	31	80.00	78.00	73.00	68.00	63.00	53.00	43.00	5.00
60	1982	32	80.00	78.00	73.00	68.00	63.00	53.00	43.00	5.00
60	1981	33	80.00	78.00	73.00	68.00	63.00	53.00	43.00	5.00
60	1980	34	80.00	78.00	73.00	68.00	63.00	53.00	43.00	5.00
60	1979	35	80.00	78.00	73.00	68.00	63.00	53.00	43.00	5.00
60	1978	36	78.00	74.00	70.00	65.00	60.00	50.00	40.00	5.00
60	1977	37	78.00	74.00	70.00	65.00	60.00	50.00	40.00	5.00
60	1976	38	78.00	74.00	70.00	65.00	60.00	50.00	40.00	5.00
60	1975	39	78.00	74.00	70.00	65.00	60.00	50.00	40.00	5.00
60	1974	40	78.00	74.00	70.00	65.00	60.00	50.00	40.00	5.00
60	1973	41	75.00	70.00	65.00	60.00	55.00	45.00	35.00	5.00
60	1972	42	75.00	70.00	65.00	60.00	55.00	45.00	35.00	5.00

60	1971	43	75.00	70.00	65.00	60.00	55.00	45.00	3500	5.00
60	1970	44	75.00	70.00	65.00	60.00	55.00	45.00	35.00	5.00
60	1969	45	75.00	70.00	65.00	60.00	55.00	45.00	35.00	5.00
60	1968	46	75.00	70.00	65.00	60.00	55.00	45.00	35.00	5.00
60	1967	47	75.00	70.00	65.00	60.00	55.00	45.00	35.00	5.00
60	1966	48	75.00	70.00	65.00	60.00	55.00	45.00	35.00	5.00
60	1965	49	75.00	70.00	65.00	60.00	55.00	45.00	35.00	5.00
60	1964	50	75.00	70.00	65.00	60.00	55.00	45.00	35.00	5.00
60	1963	51	70.00	65.00	60.00	55.00	50.00	40.00	30.00	5.00
60	1962	52	70.00	65.00	60.00	55.00	50.00	40.00	30.00	5.00
60	1961	53	70.00	65.00	60.00	55.00	50.00	40.00	30.00	5.00
60	1960	54	70.00	65.00	60.00	55.00	50.00	40.00	30.00	5.00
60	1959	55	70.00	65.00	60.00	55.00	50.00	40.00	30.00	5.00
60	1958	56	70.00	65.00	60.00	55.00	50.00	40.00	30.00	5.00
60	1957	57	70.00	65.00	60.00	55.00	50.00	40.00	30.00	5.00
60	1956	58	70.00	65.00	60.00	55.00	50.00	40.00	30.00	5.00
60	1955	59	70.00	65.00	60.00	55.00	50.00	40.00	30.00	5.00
60	1954	60	70.00	65.00	60.00	55.00	50.00	40.00	30.00	5.00
60	1953	61	65.00	60.00	55.00	50.00	45.00	35.00	25.00	5.00

Residential 30-Year depreciation										
Economic Life	Eff Year	Eff Age	Excel	Very good	Good	Average	Fair	Poor	Very Poor	Unsound
30	2014	0	96.00	96.00	96.00	94.00	89.00	79.00	68.00	5.00
30	2013	1	96.00	96.00	96.00	94.00	89.00	79.00	68.00	5.00
30	2012	2	96.00	96.00	96.00	94.00	89.00	79.00	68.00	5.00
30	2011	3	96.00	96.00	96.00	94.00	89.00	79.00	68.00	5.00
30	2010	4	91.00	91.00	91.00	86.00	81.00	71.00	60.00	5.00
30	2009	5	91.00	91.00	91.00	86.00	81.00	71.00	60.00	5.00
30	2008	6	91.00	91.00	91.00	86.00	81.00	71.00	60.00	5.00
30	2007	7	80.00	80.00	80.00	75.00	70.00	60.00	50.00	5.00
30	2006	8	80.00	80.00	80.00	75.00	70.00	60.00	50.00	5.00
30	2005	9	80.00	80.00	80.00	75.00	70.00	60.00	50.00	5.00
30	2004	10	80.00	80.00	80.00	75.00	70.00	60.00	50.00	5.00
30	2003	11	68.00	68.00	68.00	63.00	58.00	48.00	40.00	5.00
30	2002	12	68.00	68.00	68.00	63.00	58.00	48.00	40.00	5.00
30	2001	13	68.00	68.00	68.00	63.00	58.00	48.00	40.00	5.00
30	2000	14	68.00	68.00	68.00	63.00	58.00	48.00	40.00	5.00
30	1999	15	68.00	68.00	68.00	63.00	58.00	48.00	40.00	5.00
30	1998	16	55.00	55.00	55.00	50.00	45.00	35.00	30.00	5.00
30	1997	17	55.00	55.00	55.00	50.00	45.00	35.00	30.00	5.00
30	1996	18	55.00	55.00	55.00	50.00	45.00	35.00	30.00	5.00
30	1995	19	55.00	55.00	55.00	50.00	45.00	35.00	30.00	5.00
30	1994	20	55.00	55.00	55.00	50.00	45.00	35.00	30.00	5.00
30	1993	21	45.00	45.00	45.00	40.00	35.00	25.00	20.00	5.00
30	1992	22	45.00	45.00	45.00	40.00	35.00	25.00	25.00	5.00
30	1991	23	45.00	45.00	45.00	40.00	35.00	25.00	25.00	5.00
30	1990	24	45.00	45.00	45.00	40.00	35.00	25.00	25.00	5.00
30	1989	25	45.00	45.00	45.00	40.00	35.00	25.00	25.00	5.00
30	1988	26	35.00	35.00	35.00	30.00	25.00	20.00	15.00	5.00
30	1987	27	35.00	35.00	35.00	30.00	25.00	20.00	15.00	5.00
30	1986	28	35.00	35.00	35.00	30.00	25.00	20.00	15.00	5.00
30	1985	29	35.00	35.00	35.00	30.00	25.00	20.00	15.00	5.00
30	1984	30	35.00	35.00	35.00	30.00	25.00	20.00	15.00	5.00
30	1983	31	30.00	30.00	30.00	25.00	20.00	15.00	12.00	5.00