

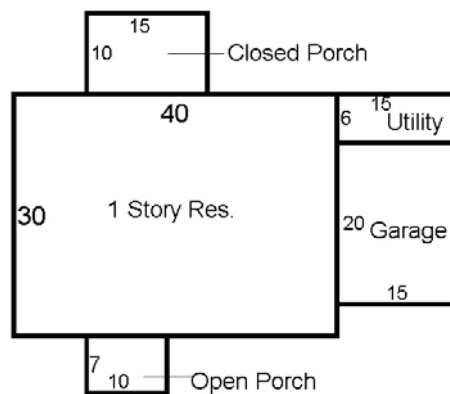
**Calculation:** Before replacement cost of a structure can be computed, an appraiser must visit the site and measure the dimensions of the building. He must sketch a diagram of the structure and inventory all pertinent construction data. The building must be classified, or graded, and an estimate of its physical condition made. Out of this information there emerges the key factors utilized in making the computation.

Improvement Type Code
Class of Construction
Base Area
Adjusted Area
Base Rate
Adjusted Rate
Extra Features
Condition

**Improvement Type Code:** The appraiser must determine improvement type of a structure so that the correct base rate table is used in pricing. Note: Occupancy code will be used to determine the correct base rate table if the appraiser is reclassifying the structure with an occupancy override.

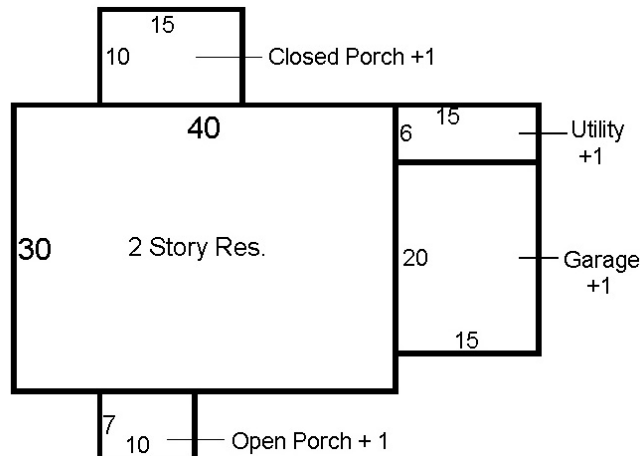
**Base Area:** The base area of a structure is that area upon which the cost per square foot is based. It is 100% of the ground floor living area in a residential structure; leaving off upper floors, attached garages, porches or other lesser-costing areas. Examples below indicate base areas and how they are calculated.

EXAMPLE: Base area, one-story residence with lesser-costing areas.



Base Area = 30 x 40 = 1,200 S.F.

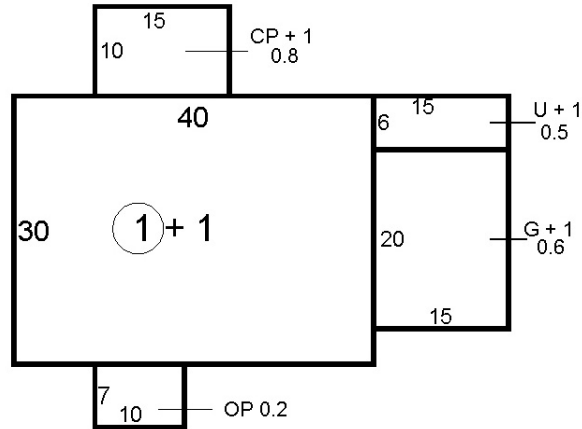
EXAMPLE: Base area, two-story residence with lesser-costing areas.



Base Area = 30 x 40 = 1,200 S.F.

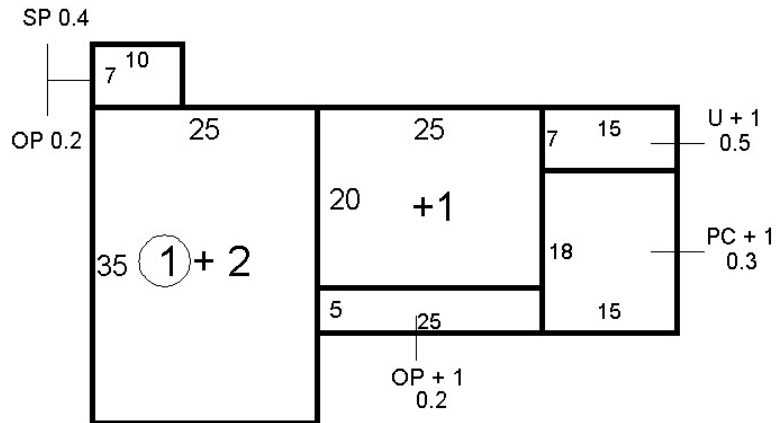
Adjusted Area: In addition to the calculation of the living area of a structure, it is necessary that the lesser-costing areas be included in the total replacement cost. If the 100% living area of a residence costs X number of dollars per square foot to construct, it is known that structural features such as attached garages, porches, basements, etc. will cost something less than X number of dollars per square foot. Square foot costs could be determined for each structural variation, areas calculated and total cost determined by combining the sum of all lesser-costing areas with the cost of the 100% area. However, this approach is not practical since: (1) tables for every possible structural variation would have to be furnished, and (2) extra space would be required for listing these items. To avoid this cumbersome procedure, the structural features mentioned above are adjusted in proportion to their relationship to the living area by means of the use of decimals, or percentages. The result is a total adjusted area to which the rate for the living area can be applied. Example: Assume the cost per square foot for the living area of a structure is \$36.00 and the cost to construct an open porch is \$7.20 per square foot, then we would say that the porch would cost  $\$7.20 \div \$36.00$  or 20% of the house cost; or, in terms of decimals, this would be 0.2. The decimal is applied to the area, enabling one rate to be applied to the entire structure. See Table 2 (Residential Symbols and Decimals) on page 8-32.

EXAMPLE: Adjusted area.



Base Area	30 x 40 =		1,200 S.F.
C. P.	10 x 15 x 0.8 =	120	
U.	6 x 15 x 0.5 =	45	
G.	15 x 20 x 0.6 =	180	
O. P.	7 x 10 x 0.2 =	<u>14</u>	
Total Decimal Area			<u>359 S.F.</u>
Total Adjusted Area			1,559 S.F.

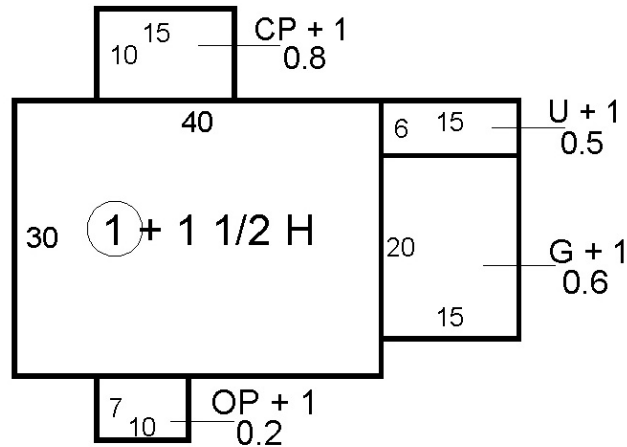
EXAMPLE: Adjusted area, one and two-story residences with lesser-costing areas.



Base Area:	25 x 35	=		875 S.F.
	20 x 25	=		<u>500 S.F.</u>
Total Base Area				1,375 S.F.
Upper Floor	25 x 35 x 1.0	=	875	
S. P.	7 x 10 x 0.4	=	28	
O. P.	7 x 10 x 0.2	=	14	
O. P.	5 x 25 x 0.2	=	25	
U.	7 x 15 x 0.5	=	53	
P. C.	15 x 18 x 0.3	=	<u>81</u>	
Total Decimal Area				<u>1,076 S.F.</u>
Total Adjusted Area				2,451 S.F.

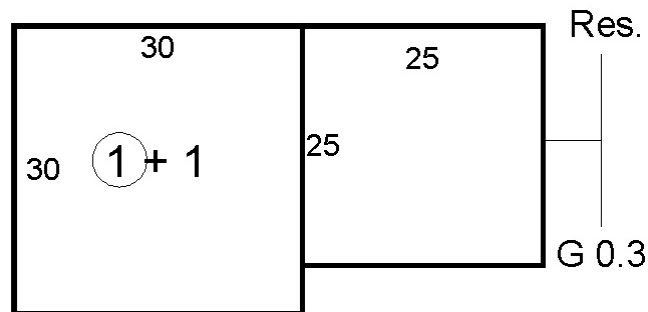
Examples below demonstrate calculations of adjusted area.

EXAMPLE: Adjusted area.



Base Area	30 x 40 =		1,200 S.F.
Upper Floor	30 x 40 x 0.5 =	600	
C. P.	10 x 15 x 0.8 =	120	
U.	6 x 15 x 0.5 =	45	
G.	15 x 20 x 0.6 =	180	
O. P.	7 x 10 x 0.2 =	<u>14</u>	
Total Decimal Area			<u>959 S.F.</u>
Total Adjusted Area			2,159 S.F.

EXAMPLE: Adjusted area, split-level residence.



Base Area	30 x 30 =	900	
	25 x 25 =	<u>625</u>	
Total Base Area			1,525 S.F.
Garage	25 x 25 x 0.3 =	<u>188 S.F.</u>	
Total Adjusted Area			1,713 S.F.

