

Table 1-31  
Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft.,  
One-Story House: Type O

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE	20.6	20.6	20.6	20.6
	Door 1 Window 1 Window 2 * Wall 1 Wall 2 * Roof 1 Floor 1 NR AFTER		SC+SE+ST RSTC45 RSTC35  S JL+GYp	RSTC35 RSTC45 RSTC40 WDGY+MGA WDGY+GYp S JL+GYp	RSTC40 RSTC45 RSTC45 WDGY+MGA WDGY+MGA S JL+A+RG FB+A+STd
Dining Room	NR BEFORE	21.9	21.9	21.9	21.9
	Window 1 * Window 2 Wall 1 * Wall 2 Roof 1 Floor 1 NR AFTER		RSTC40 RSTC45  WDGY+2GY S JL+GYp	RSTC40 RSTC45 WDGY+GYp WDGY+MGA S JL+GYp	RSTC45 RSTC45 WDGY+MGA WDGY+MGA S JL+A+RG FB+A+STd
Kitchen	NR BEFORE	18.6	18.6	18.6	18.6
	Door 1 Window 1 Wall 1 Roof 1 Floor 1 NR AFTER	RSTC35 RSTC45	RSTC40 RSTC45  S JL+GYp	RSTC40 RSTC45  S JL+GYp	RSTC40 RSTC45  S JL+A+RG FB+A+STd
Bedroom #1	NR BEFORE	23.3	23.3	23.3	23.3
	Window 1 * Window 2 Wall 1 * Wall 2 Roof 1 Floor 1 NR AFTER		RSTC45 RSTC45 WDGY+GYp WDGY+GYp S JL+GYp	RSTC35 RSTC45 WDGY+GYp WDGY+MGA S JL+GYp	RSTC45 RSTC45 WDGY+MG WDGY+MGA S JL+A+RG FB+A+STd
Bedroom #2	NR BEFORE	23.3	23.3	23.3	23.3
	Window 1 Wall 1 Roof 1 Floor 1 NR AFTER		RSTC45 WDGY+2GY S JL+GYp	RSTC45 WDGY+2GY S JL+GYp	RSTC45 WDGY+MGA S JL+A+RG FB+A+STd
Library/Den	NR BEFORE	20.0	20.0	20.0	20.0
	Window 1 Wall 1 Roof 1 Floor 1 NR AFTER		RSTC40 WDGY+GYp S JL+GYp	RSTC45 WDGY+MGA S JL+GYp	RSTC45 WDGY+MGA S JL+A+RG FB+A+STd
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$1.10	\$13.45	\$16.28	\$20.34

\* 5 dB shielding assumed.

Table 1-32  
Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft.,  
One-Story House: Type P

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE	18.4	18.4	18.4	18.4
	Door 1	SC+SE+ST	RSTC35	RSTC40	RSTC40
	Window 1	8G+STC25	RSTC35	RSTC45	RSTC45
	Window 2 *	8G+STC25	WDGY+GYp	RSTC40	RSTC45
	Wall 1				WDGY+MG
	Wall 2 *				WDGY+MG
	Roof 1	EL+Ab+GY	EL+Ab+GY	EL+Ab+GY	EL+SpC B
Floor 1					
NR AFTER	24.8	26.0	29.6	34.8	
DiningRoom	NR BEFORE	19.4	19.4	19.4	19.4
	Window 1 *	8G+STC25	RSTC35	RSTC45	RSTC45
	Window 2	8G+STC25	RSTC35	RSTC45	RSTC40
	Wall 1 *		WDGY+GYp	WDGY+RGA	WDGY+MGA
	Wall 2			WDGY+2GY	WDGY+MGA
	Roof 1	EL+Ab+GY	EL+Ab+GY	EL+Ab+GY	EL+SpC B
	Floor 1				
NR AFTER	24.4	26.1	29.7	35.5	
Kitchen	NR BEFORE	17.2	17.2	17.2	17.2
	Door 1	SC+SE+ST	RSTC40	RSTC40	RSTC40
	Window 1	8G+STC25	RSTC45	RSTC45	RSTC45
	Wall 1				
	Roof 1	EL+Ab+GY	EL+Ab+GY	EL+Ab+GY	EL+SpC B
	Floor 1				
NR AFTER	22.3	24.3	24.3	25.0	
Bedroom #1	NR BEFORE	19.9	19.9	19.9	19.9
	Window 1 *	8G+STC25	RSTC35	RSTC45	RSTC45
	Window 2	8G+STC25	RSTC35	RSTC45	RSTC45
	Wall 1 *			WDGY+RGA	WDGY+MG
	Wall 2			WDGY+2GY	WDGY+MG
	Roof 1	EL+Ab+GY	EL+Ab+GY	EL+Ab+GY	EL+SpC B
	Floor 1				
NR AFTER	25.4	26.3	29.8	34.7	
Bedroom #2	NR BEFORE	20.0	20.0	20.0	20.0
	Window 1	8G+STC25	RSTC35	RSTC45	RSTC45
	Wall 1			WDGY+RGA	WDGY+MG
	Roof 1	EL+Ab+GY	EL+Ab+GY	EL+Ab+GY	EL+SpC B
	Floor 1				
NR AFTER	25.6	26.6	30.5	35.0	
Library/Den	NR BEFORE	18.1	18.1	18.1	18.1
	Window 1	8G+STC25	RSTC35	RSTC45	RSTC45
	Wall 1		WDGY+GYp	WDGY+MGA	WDGY+MGA
	Roof 1	EL+Ab+GY	EL+Ab+GY	EL+Ab+GY	EL+SpC B
	Floor 1				
NR AFTER	22.1	25.3	30.9	35.2	
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$6.74	\$11.34	\$18.04	\$22.80

\* 5 dB shielding assumed.

Table 1-33  
Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft.,  
One-Story House: Type Q

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE	19.3	19.3	19.3	19.3
	Door 1 Window 1 Window 2 * Wall 1 Wall 2 * Roof 1 Floor 1 NR AFTER		SG+WStrp RSTC35 RSTC35  SJL+A+RG	SG+WS+SG RSTC40 RSTC40 WDGY+GYp WDGY+GYp SJL+A+RG	SG+WS+SG RSTC45 RSTC45 WDGY+MGA WDGY+MGA SJL+A+RG
Dining Room	NR BEFORE	20.0	20.0	20.0	20.0
	Window 1 * Window 2 Wall 1 * Wall 2 Roof 1 Floor 1 NR AFTER		RSTC35 RSTC35  SJL+A+RG	RSTC45 RSTC40 WDGY+2GY WDGY+GYp SJL+A+RG	RSTC45 RSTC45 WDGY+MGA WDGY+MGA SJL+A+RG
Kitchen	NR BEFORE	17.9	17.9	17.9	17.9
	Door 1 Window 1 Wall 1 Roof 1 Floor 1 NR AFTER	RSTC40 8P+STC25	RSTC40 RSTC45  SJL+A+RG	RSTC40 RSTC45  SJL+A+RG	RSTC40 RSTC45  SJL+A+RG
Bedroom #1	NR BEFORE	21.7	21.7	21.7	21.7
	Window 1 * Window 2 Wall 1 * Wall 2 Roof 1 Floor 1 NR AFTER		RSTC35 RSTC35  SJL+A+RG	RSTC45 RSTC40 WDGY+2GY WDGY+GYp SJL+A+RG	RSTC45 RSTC45 WDGY+MGA WDGY+MGA SJL+A+RG
Bedroom #2	NR BEFORE	21.7	21.7	21.7	21.7
	Window 1 Wall 1 Roof 1 Floor 1 NR AFTER		RSTC35  SJL+A+RG	RSTC40 WDGY+GYp SJL+A+RG	RSTC40 WDGY+MGA SJL+A+RG
Library/Den	NR BEFORE	18.3	18.3	18.3	18.3
	Window 1 Wall 1 Roof 1 Floor 1 NR AFTER	8P+STC25 WDGY+2GY	RSTC35 WDGY+GYp SJL+A+RG	RSTC45 WDGY+RGA SJL+A+RG	RSTC45 WDGY+MGA SJL+A+RG
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$3.08	\$7.63	\$16.50	\$18.37

\* 5 dB shielding assumed.

Table 1-34  
 Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft.,  
 One-Story House: Type R

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE	19.9	19.9	19.9	19.9
	Door 1 Window 1 Window 2 * Wall 1 Wall 2 * Roof 1 Floor 1 NR AFTER		SC+SEald RSTC40	RSTC35 RSTC40 RSTC35 VP+Absrp	RSTC40 RSTC45 RSTC40 HBLK+MGA HBLK+GYp VP+Absrp
Dining Room	NR BEFORE	21.2	21.2	21.2	21.2
	Window 1 * Window 2 Wall 1 * Wall 2 Roof 1 Floor 1 NR AFTER		8P+STC25 8P+STC25	RSTC35 RSTC35 VP+Absrp	RSTC45 RSTC45 HBLK+GYp HBLK+RGA VP+Absrp
Kitchen	NR BEFORE	18.9	18.9	18.9	18.9
	Door 1 Window 1 Wall 1 Roof 1 Floor 1 NR AFTER	SC+SE+ST 8P+STC25	SC+SE+ST 8P+STC25	RSTC35 RSTC40 VP+Absrp	RSTC40 RSTC45 VP+Absrp
Bedroom #1	NR BEFORE	23.5	23.5	23.5	23.5
	Window 1 * Window 2 Wall 1 * Wall 2 Roof 1 Floor 1 NR AFTER		8P+STC25 8P+STC25	RSTC35 RSTC35 VP+Absrp	RSTC35 RSTC45 HBLK+GYp HBLK+2GY VP+Absrp
Bedroom #2	NR BEFORE	23.2	23.2	23.2	23.2
	Window 1 Wall 1 Roof 1 Floor 1 NR AFTER		8P+STC25 HBLK+RGA	RSTC35 VP+Absrp	RSTC40 HBLK+2GY VP+Absrp
Library/Den	NR BEFORE	19.8	19.8	19.8	19.8
	Window 1 Wall 1 Roof 1 Floor 1 NR AFTER		8P+STC25	RSTC40 VP+Absrp	RSTC45 HBLK+2GY VP+Absrp
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$0.38	\$4.66	\$8.94	\$15.51

\* 5 dB shielding assumed.

Table 1-35  
Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft.,  
One-Story House: Type S

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE Door 1 Window 1 Window 2 * Wall 1 Wall 2 * Roof 1 Floor 1 NR AFTER	21.5	21.5 SC+SE+ST 8G+STC25 8G+STC25 BRIK+GYp BRIK+GYp	21.5 SC+SE+ST RSTC40 RSTC35	21.5 RSTC40 RSTC40 RSTC40 BRIK+2GY BRIK+2GY VP+Absrp
	21.5	26.9	29.5	35.1	
Dining Room	NR BEFORE Window 1 * Window 2 Wall 1 * Wall 2 Roof 1 Floor 1 NR AFTER	24.1	24.1	24.1 RSTC35 RSTC35	24.1 RSTC40 RSTC40 BRIK+2GY BRIK+GYp VP+Absrp
	24.1	24.1	32.7	36.0	
Kitchen	NR BEFORE Door 1 Window 1 Wall 1 Roof 1 Floor 1 NR AFTER	19.9	19.9 SC+SE+ST 8G+STorm	19.9 RSTC35 RSTC35	19.9 RSTC40 RSTC45 VP+Absrp
	19.9	25.1	31.1	35.1	
Bedroom #1	NR BEFORE Window 1 * Window 2 Wall 1 * Wall 2 Roof 1 Floor 1 NR AFTER	26.2	26.2	26.2 RSTC35 RSTC35	26.2 RSTC35 RSTC35 BRIK+GYp BRIK+GYp VP+Absrp
	26.2	26.2	33.4	34.9	
Bedroom #2	NR BEFORE Window 1 Wall 1 Roof 1 Floor 1 NR AFTER	26.0	26.0	26.0 RSTC35	26.0 RSTC35 BRIK+GYp VP+Absrp
	26.0	26.0	33.5	35.0	
Library/Den	NR BEFORE Window 1 Wall 1 Roof 1 Floor 1 NR AFTER	22.7	22.7 8G+STC25 BRIK+GYp	22.7 RSTC35	22.7 RSTC40 BRIK+GYp VP+Absrp
	22.7	27.2	31.9	35.3	
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$0.00	\$4.37	\$7.33	\$14.08

\* 5 dB shielding assumed.

**Table 1-36**  
**Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft.,**  
**One-Story House: Type T**

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE	21.1	21.1	21.1	21.1
	Door 1 Window 1 Window 2 * Wall 1 Wall 2 * Roof 1 Floor 1 NR AFTER		RSTC35 8G+STC25 8G+STC25	RSTC35 RSTC35 RSTC35  S JL+A+RG	RSTC40 RSTC45 RSTC45 BR IK+2GY BR IK+2GY S JL+A+RG
Dining Room	NR BEFORE	23.3	23.3	23.3	23.3
	Window 1 * Window 2 Wall 1 * Wall 2 Roof 1 Floor 1 NR AFTER		8G+STC25 8G+STC25 BR IK+RGA BR IK+RGA	RSTC35 RSTC35  S JL+A+RG	RSTC40 RSTC40 BR IK+2GY BR IK+GYp S JL+A+RG
Kitchen	NR BEFORE	19.6	19.6	19.6	19.6
	Door 1 Window 1 Wall 1 Roof 1 Floor 1 NR AFTER		SC+SE+ST 8G+STC25	SC+SE+ST RSTC40  S JL+A+RG	RSTC40 RSTC45  S JL+A+RG
Bedroom #1	NR BEFORE	25.0	25.0	25.0	25.0
	Window 1 * Window 2 Wall 1 * Wall 2 Roof 1 Floor 1 NR AFTER			RSTC35 RSTC35  S JL+A+RG	RSTC40 RSTC40 BR IK+2GY BR IK+GYp S JL+A+RG
Bedroom #2	NR BEFORE	24.9	24.9	24.9	24.9
	Window 1 Wall 1 Roof 1 Floor 1 NR AFTER			RSTC35  S JL+A+RG	RSTC40 BR IK+GYp S JL+A+RG
Library/Den	NR BEFORE	22.1	22.1	22.1	22.1
	Window 1 Wall 1 Roof 1 Floor 1 NR AFTER		8G+STC25 BR IK+MGA	RSTC35  S JL+A+RG	RSTC40 BR IK+GYp S JL+A+RG
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$0.00	\$6.33	\$9.32	\$16.33

\* 5 dB shielding assumed.

Table 1-37  
Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft.,  
Manufactured Home: Type U

Room	Building Element	Modifications by Noise Zone						
		MH L65	MH L70	MH L75	MH L80			
Living Room	NR BEFORE	18.3	18.3	18.3	18.3			
	Door 1 Window 1 Window 2 * Wall 1 Wall 2 * Roof 1 Floor 1 NR AFTER	HC+WS+ST 8G+STC25 8G+STC25	HC+WS+ST RSTC35 RSTC35 WDGY+2GY WDGY+2GY VP+Absrp	HC+WS+ST RSTC45 RSTC45 WDGY+2GY WDGY+2GY VP+Absrp FV+Baf+A	HC+WS+ST RSTC45 RSTC45 WDGY+2GY WDGY+2GY VP+Absrp FV+Baf+A	23.2	25.3	25.7
Kitchen	NR BEFORE	23.3	23.3	23.3	23.3			
	Window 1 Window 2 * Wall 1 Wall 2 * Roof 1 Floor 1 NR AFTER		RSTC45 RSTC45 VP+Absrp	RSTC45 RSTC45 VP+Absrp FV+Baf+A	RSTC45 RSTC45 VP+Absrp FV+Baf+A	23.3	27.4	27.7
Bedroom #1	NR BEFORE	19.8	19.8	19.8	19.8			
	Door 1 Window 1 Window 2 Wall 1 Wall 2 Wall 3 * Roof 1 Floor 1 NR AFTER		HC+WS+ST RSTC35 RSTC35 WDGY+GYp WDGY+GYp VP+Absrp	HC+WS+ST RSTC45 RSTC45 WDGY+2GY WDGY+2GY WDGY+2GY VP+Absrp FV+Baf+A	HC+WS+ST RSTC45 RSTC45 WDGY+2GY WDGY+2GY WDGY+2GY VP+Absrp FV+Baf+A	19.8	25.4	27.8
Bedroom #2	NR BEFORE	21.7	21.7	21.7	21.7			
	Window 1 Window 2 Wall 1 Wall 2 Wall 3 * Roof 1 Floor 1 NR AFTER		RSTC35 RSTC35 WDGY+GYp VP+Absrp	RSTC45 RSTC45 WDGY+2GY WDGY+2GY WDGY+2GY VP+Absrp FV+Baf+A	RSTC45 RSTC45 WDGY+2GY WDGY+2GY WDGY+2GY VP+Absrp FV+Baf+A	21.7	25.4	30.4
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$1.38	\$11.11	\$18.79	\$18.79			

\* 5 dB shielding assumed.

**Table 1-38**  
**Noise Reduction, Modifications, and Cost/Dwelling Sq.Ft.,**  
**Two-Story Townhouse: Type v**

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE Door 1 * Window 1 * Wall 1 * Roof 1 Floor 1	25.5	25.5	25.5 SC+SE+MT RSTC35	25.5 RSTC40 RSTC45 WDGY+RGA
	NR AFTER	25.5	25.5	30.2	35.8
Dining Room	NR BEFORE Window 1 Wall 1 Roof 1 Floor 1	24.4	24.4	24.4 RSTC40 WDGY+GYp	24.4 RSTC45 WDGY+RGA
	NR AFTER	24.4	24.4	31.6	35.1
Kitchen	NR BEFORE Door 1 Window 1 Wall 1 Roof 1 Floor 1	19.8 SG+WS+SG 8G+STorm	19.8 SG+WS+SG 8G+STorm	19.8 SG+WS+SG RSTC45	19.8 SG+WS+SG RSTC45
	NR AFTER	19.8	26.0	29.2	29.2
Bedroom #1	NR BEFORE Window 1 Wall 1 Roof 1 Floor 1	25.0	25.0	25.0 RSTC35 WDGY+GY	25.0 RSTC45 WDGY+MGA
	NR AFTER	25.0	25.0	30.4	35.3
Bedroom #2	NR BEFORE Window 1 * Wall 1 * Roof 1 Floor 1	28.8	28.8	28.8	28.8 RSTC45 WDGY+2GY
	NR AFTER	28.8	28.8	28.8	34.7
Bedroom #3	NR BEFORE Window 1 * Wall 1 * Roof 1 Floor 1	28.3	28.3	28.3 8G+STC25	28.3 RSTC45 WDGY+RGA
	NR AFTER	28.3	28.3	30.4	35.1
Basement	NR BEFORE Window 1 * Window 2 * Wall 1 * Roof 1 Floor 1	32.7	32.7	32.7	32.7 RSTC35 RSTC35
	NR AFTER	32.7	32.7	32.7	43.4
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$0.00	\$0.50	\$2.95	\$6.40

\* 5 dB shielding assumed.



**Table 1-39**  
**Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft.,**  
**Two-Story Townhouse: Type W**

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE Door 1 * Window 1 * Wall 1 * Roof 1 Floor 1	26.2	26.2	26.2 SC+SEald RSTC35	26.2 RSTC35 RSTC35
	NR AFTER	26.2	26.2	31.4	35.7
Dining Room	NR BEFORE Window 1 Wall 1 Roof 1 Floor 1	25.7	25.7	25.7 RSTC35	25.7 RSTC35
	NR AFTER	25.7	25.7	34.9	34.9
Kitchen	NR BEFORE Door 1 Window 1 Wall 1 Roof 1 Floor 1	20.0 SG+WS+SG	20.0 SG+WS+SG	20.0 SG+WS+SG RSTC35	20.0 SG+WS+SG RSTC45
	NR AFTER	20.0	24.9	31.1	32.2
Bedroom #1	NR BEFORE Window 1 Wall 1 Roof 1 Floor 1	26.7	26.7	26.7 RSTC35	26.7 RSTC40
	NR AFTER	26.7	26.7	34.1	35.1
Bedroom #2	NR BEFORE Window 1 * Wall 1 * Roof 1 Floor 1	30.1	30.1	30.1	30.1 RSTC35
	NR AFTER	30.1	30.1	30.1	35.3
Bedroom #3	NR BEFORE Window 1 * Wall 1 * Roof 1 Floor 1	29.7	29.7	29.7	29.7 RSTC35
	NR AFTER	29.7	29.7	29.7	35.2
Basement	NR BEFORE Window 1 * Window 2 * Wall 1 * Roof 1 Floor 1	32.7	32.7	32.7	32.7 RSTC35 RSTC35
	NR AFTER	32.7	32.7	32.7	43.4
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$0.00	\$0.41	\$1.98	\$3.85

\* 5 dB shielding assumed.

Table 1-40  
Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft.,  
Two-Story Townhouse: Type X

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE	24.5	24.5	24.5	24.5
	Door 1 * Window 1 * Window 2 * Wall 1 * Wall 2 * Roof 1 Floor 1			RSTC35 RSTC35 RSTC35	RSTC40 RSTC40 RSTC40 WDGY+RGA WDGY+RGA
	NR AFTER	24.5	24.5	30.1	35.0
Dining Room	NR BEFORE	24.4	24.4	24.4	24.4
	Window 1 Wall 1 Roof 1 Floor 1			RSTC40 WDGY+GYp	RSTC45 WDGY+RGA
	NR AFTER	24.4	24.4	31.6	35.1
Kitchen	NR BEFORE	19.2	19.2	19.2	19.2
	Door 1 Window 1 Wall 1 Wall 2 Roof 1 Floor 1		SG+WS+SG 8G+STC25	SG+WS+SG RSTC45	SG+WS+SG RSTC45
	NR AFTER	19.2	24.4	25.5	25.5
Bedroom #1	NR BEFORE	22.0	22.0	22.0	22.0
	Window 1 * Window 2 * Wall 1 * Wall 2 * Roof 1 Floor 1		8G+STC25 8G+STC25 WDGY+2GY WDGY+2GY	RSTC40 RSTC40 WDGY+2GY WDGY+2GY	RSTC45 RSTC45 WDGY+MGA WDGY+MGA
	NR AFTER	22.0	26.9	30.3	34.7
Bedroom #2	NR BEFORE	25.9	25.9	25.9	25.9
	Window 1 * Window 2 * Wall 1 * Wall 2 * Roof 1 Floor 1			RSTC35 RSTC35 WDGY+GYp WDGY+GYp	RSTC45 RSTC45 WDGY+MGA WDGY+MG
	NR AFTER	25.9	25.9	31.0	35.0
Bedroom #3	NR BEFORE	28.3	28.3	28.3	28.3
	Window 1 * Wall 1 * Roof 1 Floor 1			RSTC35	RSTC45 WDGY+RGA
	NR AFTER	28.3	28.3	31.5	35.1
Basement	NR BEFORE	32.7	32.7	32.7	32.7
	Window 1 * Window 2 * Wall 1 * Roof 1 Floor 1				RSTC35 RSTC35
	NR AFTER	32.7	32.7	32.7	43.4
Cost/Dwell.Sq.Ft.	C/D. Sq.Ft.	\$0.00	\$1.96	\$6.06	\$9.14

\* 5 dB shielding assumed.

Table 1-41  
Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft..  
Two-Story Dwelling: Type Y

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE	20.1	20.1	20.1	20.1
	Door 1 Window 1 Window 2 Wall 1 Wall 2 Roof 1 Floor 1 NR AFTER		RSTC35 RSTC35 RSTC35	RSTC40 RSTC40 RSTC40 WDGY+2GY WDGY+GYp	RSTC40 RSTC45 RSTC45 WDGY+MGA WDGY+MGA
Dining Room	NR BEFORE	26.6	26.6	26.6	26.6
	Window 1 * Window 2 * Wall 1 * Wall 2 * Roof 1 Floor 1 NR AFTER			RSTC35 RSTC40 WDGY+GYp WDGY+GYp	RSTC40 RSTC40 WDGY+RGA WDGY+RGA
Kitchen	NR BEFORE	24.6	24.6	24.6	24.6
	Door 1 * Window 1 * Wall 1 * Wall 2 * Roof 1 Floor 1 NR AFTER			RSTC40 RSTC40	RSTC40 RSTC45
Family Room	NR BEFORE	24.8	24.8	24.8	24.8
	Window 1 Wall 1 Roof 1 Floor 1 NR AFTER			RSTC35 WDGY+GYp	RSTC45 WDGY+RGA
Bedroom #1	NR BEFORE	21.8	21.8	21.8	21.8
	Window 1 Window 2 Wall 1 Wall 2 Roof 1 Floor 1 NR AFTER		RSTC40 RSTC40	RSTC45 RSTC40 WDGY+2GY WDGY+2GY	RSTC40 RSTC40 WDGY+MGA WDGY+MGA
Bedroom #2	NR BEFORE	24.6	24.6	24.6	24.6
	Window 1 Wall 1 Roof 1 Floor 1 NR AFTER			RSTC35 WDGY+2GY VP+Absrp	RSTC45 WDGY+MG VP+Ab+GY

Table 1-41 (Continued)

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Bedroom #3	NR BEFORE	22.3	22.3	22.3	22.3
	Window 1 Window 2 Wall 1 Wall 2 Roof 1 Floor 1 NR AFTER		RSTC35 RSTC35 WDGY+GYp WDGY+GYp	RSTC45 RSTC45 WDGY+2GY WDGY+GYp VP+Absrp	RSTC45 RSTC40 WDGY+MG WDGY+MGA VP+Ab+GY
Bedroom #4	NR BEFORE	26.5	26.5	26.5	26.5
	Window 1 * Window 2 * Wall 1 * Wall 2 * Roof 1 Floor 1 NR AFTER			RSTC40 RSTC40 WDGY+GYp VP+Absrp	RSTC40 RSTC35 WDGY+RGA WDGY+2GY VP+Ab+GY
Den	NR BEFORE	26.8	26.8	26.8	26.8
	Window 1 * Window 2 * Wall 1 * Wall 2 * Roof 1 Floor 1 NR AFTER			RSTC40 RSTC40 WDGY+GYp WDGY+GYp VP+Absrp	RSTC40 RSTC40 WDGY+2GY WDGY+2GY VP+Ab+GY
Basement	NR BEFORE	34.6	34.6	34.6	34.6
	Window 1 * Window 2 * Wall 1 Wall 2 * Roof 1 Floor 1 NR AFTER				
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$0.00	\$1.85	\$6.52	\$8.20

\* 5 dB shielding assumed.

Table 1-42  
Noise Reductions, Modifications, and Cost/Dwelling Sq.Ft.,  
Two-Story Dwelling: Type Z

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Living Room	NR BEFORE Door 1 Window 1 Window 2 Wall 1 Wall 2 Roof 1 Floor 1	21.1	21.1 SC+SE+ST 8G+STC25 8G+STorm	21.1 SC+SE+ST RSTC35 RSTC40 BRIK+GYp	21.1 RSTC40 RSTC40 RSTC40 BRIK+GYp BRIK+GYp
	NR AFTER	21.1	26.1	29.5	35.0
Dining Room	NR BEFORE Window 1 * Window 2 * Wall 1 * Wall 2 * Roof 1 Floor 1	28.7	28.7	28.7 RSTC35 RSTC35	28.7 RSTC35 RSTC35
	NR AFTER	28.7	28.7	36.1	36.1
Kitchen	NR BEFORE Door 1 * Window 1 * Wall 1 * Wall 2 * Roof 1 Floor 1	25.9	25.9	25.9 SC+SE+ST RSTC35	25.9 RSTC35 RSTC35
	NR AFTER	25.9	25.9	32.5	35.6
Family Room	NR BEFORE Window 1 Wall 1 Roof 1 Floor 1	26.4	26.4	26.4 RSTC35	26.4 RSTC35
	NR AFTER	26.4	26.4	35.2	35.2
Bedroom #1	NR BEFORE Window 1 Window 2 Wall 1 Wall 2 Roof 1 Floor 1	24.0	24.0	24.0 RSTC35 RSTC35	24.0 RSTC40 RSTC35 BRIK+2GY BRIK+GYp
	NR AFTER	24.0	24.0	33.7	34.8
Bedroom #2	NR BEFORE Window 1 Wall 1 Roof 1 Floor 1	27.0	27.0	27.0 RSTC35	27.0 RSTC40 VP+Absrp
	NR AFTER	27.0	27.0	34.2	37.6

Table 1-42 (Continued)

Room	Building Element	Modifications by Noise Zone			
		60 - 65 dB	66 - 70 dB	71 - 75 dB	76 - 80 dB
Bedroom #3	NR BEFORE Window 1 Window 2 Wall 1 Wall 2 Roof 1 Floor 1	24.7	24.7	24.7 RSTC35 RSTC35	24.7 RSTC40 RSTC35
	NR AFTER	24.7	24.7	33.2	VP+Absrp 35.6
Bedroom #4	NR BEFORE Window 1 * Window 2 * Wall 1 * Wall 2 * Roof 1 Floor 1	28.4	28.4	28.4 RSTC35 RSTC35	28.4 RSTC35 RSTC35
	NR AFTER	28.4	28.4	34.7	VP+Absrp 36.8
Den	NR BEFORE Window 1 * Window 2 * Wall 1 * Wall 2 * Roof 1 Floor 1	28.8	28.8	28.8 RSTC35 RSTC35	28.8 RSTC35 RSTC35
	NR AFTER	28.8	28.8	34.8	VP+Absrp 36.9
Basement	NR BEFORE Window 1 * Window 2 * Wall 1 Wall 2 * Roof 1 Floor 1	34.6	34.6	34.6	34.6
	NR AFTER	34.6	34.6	34.6	34.6
Cost Per Dwelling Sq.Ft.	C/D. Sq.Ft.	\$0.00	\$0.30	\$3.30	\$4.52

\* 5 dB shielding assumed.

Table 1-43

Cost Multiplier for Each Region

Region	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
Cost Multiplier	1.03	0.86	0.77	0.88	1.07	0.78	0.87	0.84	0.94	0.79	1.04

**SINGLE NOISE ZONE MODIFICATION COSTS WORKSHEET**

<b>Region</b>	<b>DNL Zone</b>	<b>House Type</b>	<b>No. of Units</b>	<b>Cost/ Dwelling Sq.Ft.</b>	<b>Size (Sq.Ft.)</b>	<b>Unit Cost</b>	<b>TOTAL COST</b>
		A					
		B					
		C					
		D					
		E					
		F					
		G					
		H					
		I					
		J					
		K					
		L					
		M					
		N					
		O					
		P					
		Q					
		R					
		S					
		T					
		U					
		V					
		W					
		X					
		Y					
		Z					
						<b>Zone Cost:</b>	
						<b>Geographic Cost Factor:</b>	
						<b>Adjusted Zone Cost:</b>	

Figure 1-2. Single Noise Zone Modification Costs Worksheet.  
(Repeated as Figure 3-23.)

