SOUNDPROOFWINDOWS





STC Results Chart

Existing	Glass	Existing Window	Air Space between Existing Window & Soundproof Window										
Window	Configuration and thickness	by itself	2"	3"	4"	5"							
Glass	1/8"	27	43	48	49	52							
Glass	1/4"	30	46	51	51	54							
Window	dual pane 1/8 over 1/8	26	45	48	49	50							
Window	dual pane 1/8 over 3/16	31	47	51	53	55							
Window	dual pane 1/8 over 1/4	32	49	52	54	55							
Sliding Glass Door	dual pane 1/8 over 3/16	30	2		50								
Glass	9/16 Iami	38	52	57	56	59							

Sleep like a baby . . . enjoy peace and quiet

Improves U-factors Improves clear glass from 0.50 to 0.29 Low-e Glass from 0.29 to 0.21

Complete STC Test Results Inside Details on over 40 configurations

Solve Your Noise Problem .

Don't Try to Patch the Noise Problem-Fix It

Installing typical windows with an STC of 26-30 does not fix any noise problems. Upgrading to windows with an STC of 36-40 will help, but there will still be a noise problem. Noise may be reduced or even meet city requirements, but the noise problem will persist. With STC values from 48-57 you can truly <u>solve</u> the noise problem, and save more energy.

Use ONE Window for Your Entire Project.

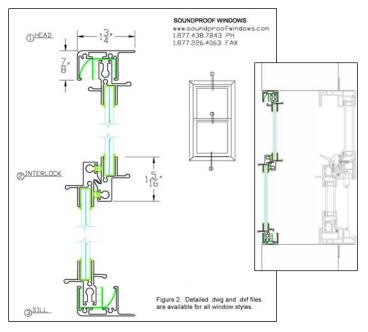
Stay with the primary windows you designed for the project. Just add our windows behind your preferred window for the best noise reduction available anywhere. Add our soundproofing windows to one area, one side, or the whole project. The outside appearance stays the same, but you can even change your mind later and soundproof other areas that were not originally designed to be soundproofed.

Excellent for Historical Restorations

When you need to keep those single pane windows, just work on getting them operable and well sealed. Then add our windows and get the noise reduction you want and the energy savings you need.

High Traffic Locations Can be Quiet.

Location. Location. Now the noise problems of many locations can be solved and you can use those locations you had to walk away from before. Often the land cost savings will completely pay for the additional construction costs. Do you wish you had Soundproof Windows available to you on any of your previous projects?



We have architectural drawings available for your convenience in .dwg, .dxf or .pdf format.

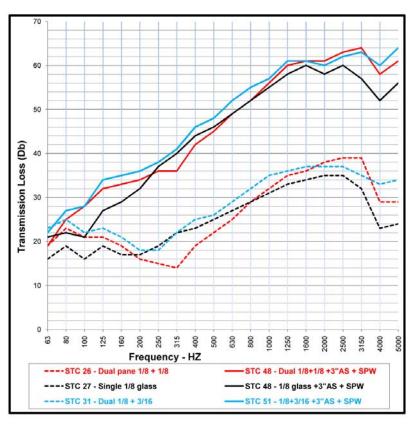


Figure 1. This line graph shows the STC frequency results from testing these six combinations. The dotted lines are the primary windows and the solid lines are those same windows with a Soundproof Window added behind it with a 3" glass to glass air space between them. For more results see the back page.

Dual Pane vs. Single Pane—which is better?

The dotted red is dual pane (STC 26) and the dotted black (STC 27) is single pane. Not much difference. The myth that dual pane is better for noise comes mainly from the air leakage of the older single pane windows. The air leaks make all the difference. Different glass has different benefits at various frequencies, but as a whole, dual pane glass is <u>not</u> better or worse than single pane.

Extensive Test Results For Your Reference

We have tested all the common window glass configurations paired with our Soundproof Window at air spaces from 2 inches to 8 inches. See the back page for the results of our sound testing. This can be an excellent reference source for current and future projects.

Better Test Results Because Of Superior Design

We have designed our windows with one thing in mind—noise reduction. We designed from scratch rather than adapting from another window design. We designed custom parts. Our good test results happened because we have designed a superior noise reduction window. As an added benefit, our windows works great for energy savings by insulating the insulated windows.

Get the noise reduction you want...

... And Save More Energy

Insulate Your Insulating Windows

Whatever your window or glass configuration may be, glass is simply a terrible insulator. Add our window and you will add insulation value to your windows. Convert a single pane to the value of a dual pane. Convert a simple dual pane into a good low-e equivalent window. Add our window behind a good low-e window and get unheard of performance in an untinted window.

99% UV Blockage

Since we use laminated glass 99% of UV radiation is blocked. This is a marked improvement over low-e glass, which typically blocks no more than 70% of the UV radiation.

Excellent for Historical Restorations and Building Conversions

Historical preservation often means you cannot replace the glass currently in the windows. There are many scenarios where you must keep the original windows and glass. By adding our windows, you solve the insulation problem and the air infiltration problem common to older windows. You likely double the insulation value of the window and cut the air infiltration down by over 95%.

LEED Referenced Energy Performance Requirements											
		Northern	North Central	South Central	Southern						
4.1 Good Windows Prerequiste	U-factor SHGC	0.35 Any	0.40 0.45	0.40 0.40	0.55 0.35						
4.2 Enhanced Windows Optional, 2 points	U-factor SHGC	0.31 Any	0.35 0.40	0.35 0.35	0.55 0.33						
0.3 Exceptional windows Deptional, 3 points SHGC		0.28 Any	0.32 0.40	0.32 0.30	0.55 0.30	Passive					
Clear/Clear Dual Pane Milgard Style Line Vinyl Window	U-factor SHGC		49 ₆₃	-/	. 29 .58	Clear/Clear Dual Pane plus SOUNDPROOFWINDOWS					
Clear/Low-e Dual Pane Milgard Style Line Vinyl Window Low-e SuncoatMAX™ with argon	U-factor		29 30	_/	. 21 .25	Clear/Low-e Dual Pane plus SOUNDPROOFWINDOWS					

Notes:

Get the noise reduction you want . . . and the energy savings you need.

Sound proof Windows STC Test Results

	Sound Transmission Loss Data Details																						
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+4*AS + SPW65 54 43 30 30 39 42 41 44 24 8 53 56 58 60 61 62 64 63 59 60 TL0#283 Vinyl Dual Pane Window - 1/8* + 71/6* A5 + 37/6* 22 23 23 35 33 74 74 74 74 74 74 73 74 73 74 73 74 73 74 73 74 73 74 73 74 73 74 73 74 73 74 73 74 73 74 73 74 73 73 73 73 73 73 73 73 73 73 73 73 73	+ 8"AS + SPW	53	45	30	35	39	42	42	44	41	50	52	56	52	55	57	59	59	61	64	61	63	TL08-268
Vinyl Dual Pane Window - 1/8" + 7/16" AS + 3/16" V <th<< td=""><td>+ 3"AS + SPW65</td><td>53</td><td>41</td><td>29</td><td>27</td><td>37</td><td>40</td><td>40</td><td>42</td><td>41</td><td>46</td><td>49</td><td>52</td><td>54</td><td>55</td><td>61</td><td>65</td><td>66</td><td>66</td><td>66</td><td>60</td><td>60</td><td>TL09-290</td></th<<>	+ 3"AS + SPW65	53	41	29	27	37	40	40	42	41	46	49	52	54	55	61	65	66	66	66	60	60	TL09-290
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+ 4"AS + SPW 53 42 28 31 36 37 38 41 44 48 50 53 55 57 60 60 61 63 64 10.8271 + 6"AS + SPW 56 44 30 32 37 39 40 43 45 51 52 55 75 90 60 60 61 63 64 10.8274 + 6"AS + SPW 57 46 32 35 40 43 44 46 52 55 56 59 60 60 61 64 63 65 10.8274 Dual 1/8" over 1/4" 32 28 27 23 25 22 19 21 21 24 37 36 37 37 34 35 10.8274 + 2"AS + SPW 54 43 29 31 37 39 43 49 51 54 55 58 59 57 61 61 63 64 10.8226 10.823 144 31 <t< td=""><td>+ 2"AS + SPW</td><td>47</td><td>37</td><td>26</td><td>25</td><td>30</td><td>30</td><td>32</td><td>34</td><td>39</td><td>43</td><td>45</td><td>48</td><td>51</td><td>54</td><td>58</td><td>59</td><td>58</td><td>60</td><td>64</td><td>59</td><td>62</td><td>TL08-270</td></t<>	+ 2"AS + SPW	47	37	26	25	30	30	32	34	39	43	45	48	51	54	58	59	58	60	64	59	62	TL08-270
+ 5"AS + SPW 56 44 30 32 37 39 40 43 45 51 52 55 57 59 60 60 61 62 61 63 62 61 63 63 64 10.8273 + 6"AS + SPW 56 44 30 31 39 41 44 46 52 56 59 60 60 61 64 63 65 TL08273 Vinyl Dual Pare Window -1/8" + 3/8" AS + 1/4" 33 37 39 43 46 49 52 56 59 56 60 63 61 64 63 65 10.8280 55 58 59 56 60 63 66 66 63 64 43 24 32 33 37 39 34 44 49 52 56 59 56 60 65 61 62 64 63 65 56 59 56 66 <td>+ 3"AS + SPW</td> <td>51</td> <td>40</td> <td>27</td> <td>28</td> <td>34</td> <td>35</td> <td>36</td> <td>38</td> <td>41</td> <td>46</td> <td>48</td> <td>52</td> <td>55</td> <td>57</td> <td>61</td> <td>61</td> <td>60</td> <td>62</td> <td>63</td> <td>60</td> <td>64</td> <td>TL08-272</td>	+ 3"AS + SPW	51	40	27	28	34	35	36	38	41	46	48	52	55	57	61	61	60	62	63	60	64	TL08-272
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+ 8"AS + SPW 57 46 32 35 40 43 44 46 47 54 56 59 50 60 60 61 64 63 65 TLOB-275 Vinyl Dual Pane Window -148" 32 26 27 23 26 27 23 26 27 23 26 27 23 37 34 46 49 52 56 59 56 60 65 60 61 64 63 61 108-280 + 2"AS + SPW 52 40 27 27 34 36 40 41 46 49 52 54 55 85 60 60 61 61 63 64 108-280 + 3"AS + SPW 54 44 30 32 39 41 44 45 45 55 56 57 75 59 58 68 63 62 57 56 54 53 55 54 53 55 55 56 55 56 53	+ 5"AS + SPW	55	44	30	32	37	39	40	43	45	51	52	55	57	59	60	60	60	61	62	62	65	TL08-273
Vinyl Dual Pane Window - 1/8" + 3/8" AS + 1/4" v<	+ 6"AS + SPW	56	44	30	31	39	41	41	44	46	52	54	57	58	58	61	63	62	61	63	63	64	TL08-274
Dual 1/8" over 1/4" 32 26 27 23 25 22 19 21 21 24 27 31 33 35 37 36 37 37 36 37 37 34 35 TL08-284 + 2"AS + SPW 40 38 27 27 34 36 36 40 41 46 49 52 56 59 59 56 60 65 60 66 108-284 + 4"AS + SPW 54 43 29 31 34 49 51 54 55 58 54 63 64 61 108-259 + 5"AS + SPW 54 44 30 32 38 41 41 46 45 56 57 57 59 59 58 58 62 65 108-256 + 6"AS + SPW 54 46 31 34 41 44 43 47 50 51 52 50 60 63 64 63 62 108-284 +	+ 8"AS + SPW	57	46	32	35	40	43	44	46	47	54	56	59	55	56	59	60	60	61	64	63	65	TL08-275
+ 2"AS + SPW 49 38 27 24 32 33 37 39 43 46 49 52 56 59 56 60 63 TL08-260 + 3"AS + SPW 52 40 27 27 34 36 36 40 41 46 49 52 56 59 57 61 61 63 64 TL08-260 + 4"AS + SPW 54 43 0 32 38 41 44 51 52 56 57 57 59 59 58 58 63 62 65 TL08-256 + 6"AS + SPW 54 46 31 34 41 45 44 51 52 56 54 53 54 56 59 59 62 TL08-266 + 6"AS + SPW 54 46 31 34 41 45 45 55 58 54 53 51 52 50 60 63 62 TL08-266 #/16" Commercial Laminated Glass 1/4" + 060PVB + 1/4"<		1/8" +	+ 3/8"																				
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SPW-SGD		50	39	25	26	32	36	32	40	40	49	51	56	60	62	62	61	62	60	61	57	62	TL08-309
	SPW-SGD *SPW= Soundproof Windo				10							-										-	

*SPW= Soundproof Window

AS = Air Space

SPW25= .250" Laminated heavy frame w/rollers SPW65= .650" Laminated glass model Vinyl windows and door are Milgard Style Line Series. IGU's were all 3/4" overall thickness. The Milgard SG Door was 1/8 + 3/16 IGU. Milgard units were tested at time of these tests and are shown above. The Milgard and Soundproof Window(SPW) windows were all 72"x48" operable sliding windows. Testing was done by Western Acoustical Labs (WEAL) - a fully accredited independent testing laboratory in California.

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