

2009 WERS Certified Products Directory - AFRC



NOTES

1. Uw is the whole window U-value
2. SHGCw is the whole window solar heat gain coefficient
3. Tw is the whole window visible (light) transmittance
4. Percentage improvement figures are compared with using base-case Generic Window 1 (3mm clear in standard aluminium frame)
5. A negative percentage improvement figure indicates performance worse than the base-case window
6. A positive percentage improvement figure indicates performance better than the base-case window
7. Maximum air infiltration is 5.0L/s.m2 at a positive pressure difference of 75 Pa as measured according to AS 2047
8. Static performance (Uw SHGCw Tw Tdw) calculated using Window 5.2 and Therm 5.2 software (LBNL), 2000-2003
9. Annual energy performance (stars and % improvements) calculated using Nationwide House Energy Rating Software (AccuRate) according to procedures of WERS 2008.
10. Results disclosed at National Fenestration Rating Council (NFRC) regulations.



Hanlon Windows Updated - 06-Nov-09						Cool %	Heat %	Total Window - NFRC			
Window ID	Glazing	Cooling Stars	Heating Stars	Uw	SHGC			Tw	Air Inf.		
Series 502/504 Aluminium Sliding Window - Single Glazed											
AWS-001-01	3Clr	☆	★★☆	12%	15%	6.4	0.73	0.75	2.91		
AWS-001-02	5Clr	☆	★★☆	13%	14%	6.4	0.72	0.75	2.91		
AWS-001-03	5Gy	☆☆	★★☆	31%	6%	6.4	0.53	0.42	2.91		
AWS-001-04	5EG	☆☆	★★☆	33%	4%	6.4	0.50	0.62	2.91		
AWS-001-05	6.38DLam	☆	★★☆	17%	14%	6.3	0.68	0.75	2.91		
AWS-001-06	6.38Sct	☆☆	★★★☆☆	35%	33%	4.6	0.58	0.69	2.91		
AWS-001-07	6.38CP	☆☆☆	★★★★	46%	26%	4.6	0.44	0.50	2.91		
Series 502/504 Aluminium Sliding Window - Double Glazed											
AWS-003-01	4/10/4	☆☆	★★★★	37%	37%	4.2	0.58	0.61	2.91		
AWS-003-02	4Az/10/4EA	☆☆☆☆	★★★★☆	59%	30%	3.7	0.32	0.47	2.91		
AWS-003-03	4/10Ar/4EA	☆☆☆	★★★★☆	44%	45%	3.4	0.55	0.56	2.91		
AWS-003-04	4/10/4EA	☆☆☆	★★★★☆	43%	42%	3.7	0.54	0.56	2.91		
AWS-003-05	5/8/5	☆☆	★★★★	38%	35%	4.3	0.57	0.61	2.91		
AWS-003-06	5EG/8Ar/5EA	☆☆☆☆	★★★★☆	59%	31%	3.6	0.33	0.46	2.91		
AWS-003-07	3EG/12/3	☆☆☆☆☆	★★★★☆	50%	29%	4.2	0.41	0.53	2.91		
AWS-003-08	3/12Ar/3EA	☆☆☆	★★★★☆	43%	46%	3.4	0.56	0.57	2.91		
Series 514 Aluminium Double Hung Window - Single Glazed											
AWS-005-01	3Clr	☆	★★☆	12%	20%	6.2	0.74	0.76	0.96		
AWS-005-02	5Clr	☆	★★☆	15%	20%	6.2	0.71	0.75	0.96		
AWS-005-03	5EG	☆☆	★★	35%	10%	6.2	0.50	0.62	0.96		
AWS-005-04	5Gy	☆☆	★★	32%	12%	6.2	0.53	0.42	0.96		
AWS-005-05	6.38DLam	☆	★★☆	19%	20%	6.1	0.68	0.75	0.96		
AWS-005-06	6.38Sct	☆☆	★★★★	37%	38%	4.3	0.58	0.69	0.96		
AWS-005-07	6.38CP	☆☆☆	★★★★☆	48%	31%	4.3	0.44	0.50	0.96		
Series 516 Aluminium Awining Window - Single Glazed											
AWS-007-01	3Clr	☆	★★★☆☆	18%	31%	6.6	0.66	0.66	0.06		
AWS-007-02	5Clr	☆	★★★☆☆	21%	31%	6.6	0.64	0.65	0.06		
AWS-007-03	5EG	☆☆	★★★	36%	23%	6.6	0.45	0.54	0.06		
AWS-007-04	5Gy	☆☆	★★★	34%	24%	6.6	0.48	0.37	0.06		
AWS-007-05	6.38DLam	☆☆	★★★☆☆	24%	31%	6.5	0.61	0.65	0.06		
AWS-007-06	6.38Sct	☆☆	★★★★☆	38%	47%	5.0	0.53	0.60	0.06		
AWS-007-07	6.38CP	☆☆☆	★★★★	47%	41%	5.0	0.41	0.43	0.06		
Series 516 Aluminium Awining Window - Double Glazed											
AWS-008-01	4/10/4	☆☆☆	★★★★☆	40%	57%	4.3	0.55	0.56	0.06		
AWS-008-02	4Az/10/4EA	☆☆☆☆	★★★★★	59%	50%	3.8	0.31	0.43	0.06		
AWS-008-03	4/10Ar/4EA	☆☆☆☆	★★★★★	46%	64%	3.6	0.52	0.52	0.06		
AWS-008-04	4/10/4EA	☆☆☆☆	★★★★★	45%	61%	3.8	0.51	0.52	0.06		
AWS-008-05	5/8/5	☆☆☆	★★★★☆	40%	55%	4.4	0.53	0.56	0.06		
AWS-008-06	5EG/8Ar/5EA	☆☆☆☆	★★★★★	59%	51%	3.7	0.32	0.42	0.06		
AWS-008-07	3EG/12/3	☆☆☆☆☆	★★★★★	52%	49%	4.3	0.39	0.48	0.06		
AWS-008-08	3/12Ar/3EA	☆☆☆	★★★★★	45%	65%	3.6	0.53	0.52	0.06		

Series 517 Aluminium Awining Window - Single Glazed

AWS-009-01	3Clr	★	★★★	16%	25%	7.1	0.66	0.66	0.06
AWS-009-02	5Clr	★	★★★	18%	25%	7.0	0.64	0.65	0.06
AWS-009-03	5EG	★★	★★☆	33%	16%	7.0	0.46	0.54	0.06
AWS-009-04	5Gv	★★	★★☆	31%	18%	7.0	0.48	0.37	0.06
AWS-009-05	6.38DLam	★	★★★	21%	25%	6.9	0.61	0.65	0.06
AWS-009-06	6.38Sct	★★	★★★★☆	35%	41%	5.5	0.53	0.60	0.06
AWS-009-07	6.38CP	★★☆	★★★★	44%	35%	5.5	0.41	0.43	0.06

Series 517 Aluminium Awining Window - Double Glazed

AWS-010-01	4/10/4	★★	★★★★★	37%	52%	4.7	0.55	0.56	0.06
AWS-010-02	4Az/10/4EA	★★★★	★★★★☆	57%	45%	4.2	0.31	0.43	0.06
AWS-010-03	4/10Ar/4EA	★★☆	★★★★☆	43%	59%	4.0	0.52	0.52	0.06
AWS-010-04	4/10/4EA	★★☆	★★★★☆	43%	57%	4.2	0.52	0.52	0.06
AWS-010-05	5/8/5	★★	★★★★★	38%	50%	4.8	0.54	0.56	0.06
AWS-010-06	5EG/8Ar/5EA	★★★★	★★★★☆	57%	47%	4.1	0.32	0.43	0.06
AWS-010-07	3EG/12/3	★★★	★★★★☆	49%	44%	4.7	0.39	0.48	0.06
AWS-010-08	3/12Ar/3EA	★★☆	★★★★☆	42%	60%	4.0	0.53	0.52	0.06

Series 541/542 Aluminium Sliding Door - Single Glazed

AWS-011-01	5Clr	☆	★★☆	14%	18%	6.2	0.72	0.76	1.65
AWS-011-02	5EG	★★	★★	34%	8%	6.2	0.50	0.63	1.65
AWS-011-03	5Gv	★☆	★★	31%	10%	6.2	0.53	0.43	1.65
AWS-011-04	6.38DLam	★	★★☆	18%	18%	6.2	0.69	0.76	1.65
AWS-011-05	6.38Sct	★★	★★★★	36%	38%	4.3	0.59	0.70	1.65
AWS-011-06	6.38CP	★★★	★★★☆	47%	30%	4.3	0.44	0.51	1.65

Series 541/542 Aluminium Sliding Door - Double Glazed

AWS-013-01	4/10/4	★★	★★★★☆	36%	42%	4.0	0.61	0.65	1.65
AWS-013-02	4Az/10/4EA	★★★★	★★★★☆	59%	35%	3.4	0.33	0.50	1.65
AWS-013-03	4/10Ar/4EA	★★☆	★★★★★	43%	50%	3.2	0.57	0.59	1.65
AWS-013-04	4/10/4EA	★★☆	★★★★☆	42%	47%	3.4	0.57	0.59	1.65
AWS-013-05	5/8/5	★★	★★★★★	37%	40%	4.1	0.59	0.64	1.65
AWS-013-06	5EG/8Ar/5EA	★★★★	★★★★★	59%	36%	3.3	0.34	0.49	1.65

Series 548-BF Aluminium BiFold Door - Single Glazed

AWS-016-01	5Clr	★☆	★★☆	29%	15%	6.1	0.57	0.58	0.80
AWS-016-02	5EG	★★☆	★★☆	42%	6%	6.1	0.40	0.48	0.80
AWS-016-03	5Gv	★★☆	★★	40%	8%	6.1	0.43	0.33	0.80
AWS-016-04	6.38DLam	★★	★★☆	32%	15%	6.0	0.54	0.58	0.80
AWS-016-05	6.38Sct	★★★	★★★★☆	44%	30%	4.6	0.47	0.53	0.80
AWS-016-06	6.38CP	★★★☆	★★★★	52%	23%	4.6	0.36	0.39	0.80

Series 548-BF Aluminium BiFold Door - Double Glazed

AWS-017-01	4/10/4	★★☆	★★★★☆	42%	35%	4.3	0.51	0.53	0.80
AWS-017-02	4Az/10/4EA	★★★★☆	★★★★	60%	28%	3.8	0.29	0.40	0.80
AWS-017-03	4/10Ar/4EA	★★★★	★★★★★	48%	41%	3.6	0.48	0.48	0.80
AWS-017-04	4/10/4EA	★★★★	★★★★★	47%	39%	3.8	0.48	0.48	0.80
AWS-017-05	5/8/5	★★☆	★★★★☆	43%	33%	4.4	0.50	0.52	0.80
AWS-017-06	5EG/8Ar/5EA	★★★★☆	★★★★☆	60%	29%	3.7	0.29	0.40	0.80

Series 549-ED Aluminium Entry Door - Single Glazed

AWS-018-01	5Clr	★☆	★★☆	31%	17%	5.9	0.56	0.58	0.80
AWS-018-02	5EG	★★☆	★★	44%	9%	5.9	0.39	0.48	0.80
AWS-018-03	5Gv	★★☆	★★	42%	10%	5.9	0.42	0.33	0.80
AWS-018-04	6.38DLam	★★	★★☆	34%	17%	5.8	0.53	0.58	0.80
AWS-018-05	6.38Sct	★★★	★★★★☆	46%	32%	4.4	0.46	0.53	0.80
AWS-018-06	6.38CP	★★★☆	★★★★	54%	25%	4.4	0.35	0.39	0.80

Series 549-ED Aluminium Entry Door - Double Glazed

AWS-029-01	5CLR	★☆☆	★★★☆☆	28%	16%	6.1	0.59	0.60	0.43
AWS-029-02	5EG	★★☆☆	★★★	41%	7%	6.1	0.41	0.50	0.43
AWS-029-03	5GY	★★☆☆	★★★	39%	8%	6.2	0.44	0.34	0.43
AWS-029-04	6.38Sct	★★☆☆	★★★★☆	44%	30%	4.6	0.48	0.55	0.43
AWS-029-05	6.38DLam	★☆☆	★★★☆☆	29%	16%	6.0	0.57	0.60	0.43
Series 410/411 Aluminium Bi-fold door - Double Glazed									
AWS-029-06	4/10/4	★★☆☆	★★★★★	42%	37%	4.2	0.52	0.54	0.43
AWS-029-07	5/8/5	★★☆☆	★★★★★	42%	35%	4.3	0.51	0.54	0.43
AWS-029-08	3/12Ar/3EA	★★★	★★★★☆	47%	45%	3.5	0.51	0.51	0.43
AWS-029-09	3EG/12/3	★★★☆☆	★★★★☆	53%	29%	4.2	0.37	0.47	0.43
AWS-029-10	4/10/4EA	★★★	★★★★★	47%	41%	3.7	0.49	0.50	0.43
AWS-029-11	4/10Ar/4EA	★★★	★★★★☆	47%	43%	3.6	0.50	0.50	0.43
AWS-029-12	4Az/10/4EA	★★★★☆	★★★★☆	60%	30%	3.7	0.30	0.42	0.43
AWS-029-13	5EG/8Ar/5EA	★★★★☆	★★★★☆	61%	31%	3.6	0.30	0.41	0.43
Series 462 Aluminium Sliding Window Single Glazed									
AWS-030-01	5CLR	★	★★★☆☆	21%	20%	6.0	0.66	0.69	1.15
AWS-030-02	5EG	★★	★★★	38%	10%	6.0	0.46	0.57	1.15
AWS-030-03	5GY	★★	★★★	36%	12%	6.0	0.49	0.39	1.15
AWS-030-04	6.38Sct	★★☆☆	★★★★★	41%	37%	4.3	0.54	0.63	1.15
AWS-030-05	6.38DLam	★	★★★☆☆	23%	20%	5.9	0.65	0.69	1.15
Series 462 Aluminium Sliding Window - Double Glazed									
AWS-030-06	4/10/4	★★☆☆	★★★★★	40%	40%	4.0	0.56	0.58	1.15
AWS-030-07	5/8/5	★★☆☆	★★★★★	41%	39%	4.1	0.54	0.58	1.15
AWS-030-08	4/10/4EA	★★★	★★★★☆	46%	44%	3.5	0.52	0.54	1.15
AWS-030-09	4/10Ar/4EA	★★★	★★★★☆	47%	47%	3.3	0.52	0.54	1.15
AWS-030-10	4Az/10/4EA	★★★★☆	★★★★☆	61%	33%	3.5	0.31	0.45	1.15
AWS-030-11	5EG/8Ar/5EA	★★★★☆	★★★★☆	61%	34%	3.4	0.32	0.44	1.15
Series 463 Aluminium Double Hung Window - Single Glazed									
AWS-031-01	5CLR	★☆☆	★★☆☆	26%	5%	6.5	0.58	0.60	4.75
AWS-031-02	5EG	★★☆☆		39%	-3%	6.5	0.40	0.49	4.75
AWS-031-03	5GY	★★		37%	-2%	6.5	0.43	0.34	4.75
AWS-031-04	6.38Sct	★★☆☆	★★★☆☆	41%	20%	5.0	0.47	0.54	4.75
AWS-031-05	6.38DLam	★☆☆	★★☆☆	28%	6%	6.4	0.57	0.60	4.75
Series 463 Aluminium Double Hung Window - Double Glazed									
AWS-031-06	4/10/4	★★☆☆	★★★★☆	41%	30%	4.5	0.52	0.54	4.75
AWS-031-07	5/8/5	★★☆☆	★★★★	41%	27%	4.6	0.51	0.54	4.75
AWS-031-08	4/10/4EA	★★★	★★★★☆	45%	33%	4.0	0.49	0.50	4.75
AWS-031-09	4/10Ar/4EA	★★★	★★★★★	46%	35%	3.8	0.49	0.50	4.75
AWS-031-10	4Az/10/4EA	★★★★	★★★★	59%	21%	4.0	0.29	0.42	4.75
AWS-031-11	5EG/8Ar/5EA	★★★★	★★★★	59%	23%	4.0	0.29	0.41	4.75
Series 466/467 Aluminium Awning Window - Single Glazed									
AWS-032-01	5CLR	★☆☆	★★★★	25%	23%	7.0	0.57	0.50	0.12
AWS-032-02	5EG	★★	★★★☆☆	38%	14%	7.0	0.40	0.28	0.12
AWS-032-03	5GY	★★☆☆	★★★☆☆	39%	12%	7.0	0.37	0.41	0.12
AWS-032-04	6.38Sct	★★☆☆	★★★★☆	40%	31%	5.9	0.44	0.48	0.12
AWS-032-05	6.38DLam	★☆☆	★★★★	28%	19%	7.0	0.52	0.52	0.12
Series 466/467 Aluminium Awning Window - Double Glazed									
AWS-032-06	4/10/4	★★☆☆	★★★★☆	42%	45%	5.0	0.47	0.47	0.12
AWS-032-07	5/8/5	★★★	★★★★★	47%	51%	4.4	0.45	0.43	0.12
AWS-032-08	5/8/5	★★☆☆	★★★★☆	43%	44%	5.0	0.46	0.47	0.12
AWS-032-09	3/12Ar/3EA	★★★	★★★★★	46%	52%	4.3	0.46	0.44	0.12
AWS-032-10	3EG/12/3	★★★☆☆	★★★★★	52%	38%	4.9	0.34	0.40	0.12
AWS-032-11	4/10/4EA	★★★	★★★★★	46%	49%	4.5	0.45	0.43	0.12

AWS-032-12	4Az/10/4EA	★★★★	★★★★	58%	39%	4.5	0.28	0.36	0.12
AWS-032-13	5EG/8Ar/5EA	★★★★	★★★★	58%	40%	4.5	0.28	0.36	0.12
Series 650 Aluminium Hinged Door - Single Glazed									
AWS-033-01	5Clr	★☆☆	★★☆☆	27%	18%	6.0	0.60	0.63	0.85
AWS-033-02	5EG	★★☆☆	★★	41%	9%	6.0	0.42	0.52	0.85
AWS-033-03	5Gy	★★☆☆	★★	39%	10%	6.0	0.45	0.35	0.85
AWS-033-04	6.38Sct	★★☆☆	★★★★☆	44%	33%	4.4	0.49	0.57	0.85
AWS-033-05	6.38DLam	★☆☆	★★☆☆	28%	18%	5.9	0.59	0.63	0.85
AWS-033-06	6.38CPClr	★★☆☆	★★★★☆	43%	33%	4.4	0.50	0.58	0.85
Series 650 Aluminium Hinged Door - Double Glazed									
AWS-033-06	4/10/4	★★☆☆	★★★★	42%	40%	4.0	0.54	0.57	0.85
AWS-033-07	5/8/5	★★☆☆	★★★★	43%	39%	4.0	0.53	0.56	0.85
AWS-033-08	3/12Ar/3EA	★★★★	★★★★★	47%	48%	3.2	0.52	0.53	0.85
AWS-033-09	3EG/12/3	★★★☆☆	★★★☆☆	54%	31%	4.0	0.38	0.48	0.85
AWS-033-10	4/10/4EA	★★★★	★★★★☆	47%	45%	3.4	0.50	0.52	0.85
AWS-033-11	4/10Ar/4EA	★★★★	★★★★☆	48%	47%	3.2	0.51	0.52	0.85
AWS-033-12	4Az/10/4EA	★★★★☆	★★★☆☆	61%	33%	3.4	0.30	0.44	0.85
AWS-033-13	5EG/8Ar/5EA	★★★★☆	★★★☆☆	61%	34%	3.4	0.31	0.43	0.85
Series 729 and 730 Thermal Heart - Thermally Broken Hinged and Bifold Door									
AWS-034-01	4AZ/10/4EA	★★★★★	★★★★	67%	39%	2.8	0.27	0.38	0.64
AWS-034-02	4Clr/10Ar4EA	★★★★	★★★★★	55%	50%	2.7	0.44	0.45	0.64
AWS-034-03	4Clr/10/4Clr	★★★☆☆	★★★★☆	50%	44%	3.3	0.47	0.49	0.64
AWS-034-04	4Clr/10/4EA	★★★☆☆	★★★★★	55%	48%	2.8	0.44	0.45	0.64
AWS-034-05	5Clr/8/5Clr	★★★☆☆	★★★★☆	51%	43%	3.4	0.46	0.49	0.64
AWS-034-06	5EG/8Ar/5EA	★★★★★	★★★★	67%	39%	2.8	0.27	0.37	0.64
AWS-034-07	6Clr/12/6Clr	★★★☆☆	★★★★☆	52%	44%	3.3	0.45	0.48	0.64
AWS-034-08	6EG/12/6Clr	★★★★★	★★★☆☆	65%	33%	3.3	0.26	0.36	0.64
AWS-034-09	6/12/6EA	★★★★	★★★★★	56%	48%	2.8	0.43	0.45	0.64
AWS-034-10	6EG/12/6EA	★★★★☆	★★★★	69%	36%	2.8	0.23	0.33	0.64
Series 726 Thermal Heart - Thermally Broken Awning/Casement Window									
AWS-035-01	4Clr/10/4Clr	★★★★	★★★★★☆☆	49%	61%	3.6	0.47	0.49	0.73
AWS-035-02	4Az/10/4EA	★★★★★	★★★★★	65%	54%	3.1	0.26	0.37	0.73
AWS-035-03	4/10Ar/4EA	★★★☆☆	★★★★★	54%	67%	2.9	0.44	0.45	0.73
AWS-035-04	4/10/4EA	★★★☆☆	★★★★★	54%	65%	3.1	0.44	0.45	0.73
AWS-035-05	5/8/5	★★★★	★★★★★☆☆	50%	60%	3.6	0.46	0.48	0.73
AWS-035-06	5EG/8Ar/5EA	★★★★★	★★★★★☆☆	65%	55%	3.1	0.27	0.37	0.73
AWS-035-07	3EG/12/3	★★★★	★★★★★	59%	54%	3.5	0.33	0.42	0.73
AWS-035-08	3/12Ar/3EA	★★★☆☆	★★★★★☆☆	53%	67%	2.9	0.45	0.45	0.73
AWS-035-09	6/12/6	★★★☆☆	★★★★★☆☆	51%	61%	3.5	0.45	0.48	0.73
AWS-035-10	6EG/12/6	★★★★☆	★★★★★	64%	50%	3.5	0.26	0.35	0.73
AWS-035-11	6/12/6EA	★★★☆☆	★★★★★	55%	64%	3.1	0.43	0.44	0.73
AWS-035-12	6EG/12/6EA	★★★★★	★★★★★	68%	53%	3.1	0.23	0.33	0.73
Series 731 Thermal Heart - Thermally Broken Stacking Door									
AWS-037-01	4/10/4	★★☆☆	★★★★☆	44%	45%	3.3	0.55	0.58	5.00
AWS-037-02	4/10/4EA	★★★★	★★★★★	50%	49%	2.7	0.51	0.53	5.00
AWS-037-03	4/10Ar/4EA	★★★☆☆	★★★★★	50%	51%	2.5	0.52	0.53	5.00
AWS-037-04	4Az/12/3EA	★★★★☆	★★★★	64%	37%	2.7	0.30	0.45	5.00
AWS-037-05	5/8/5	★★★★	★★★★☆	45%	43%	3.4	0.53	0.58	5.00
AWS-037-06	5EG/8Ar/5EA	★★★★☆	★★★★	64%	38%	2.6	0.31	0.44	5.00
AWS-037-07	6/12/6	★★★★	★★★★☆	47%	44%	3.2	0.52	0.57	5.00
AWS-037-08	6/12/6EA	★★★☆☆	★★★★★	51%	49%	2.7	0.49	0.53	5.00
AWS-037-09	6EG/12/6	★★★★☆	★★★☆☆	62%	31%	3.2	0.30	0.42	5.00
AWS-037-10	6EG/12/6EA	★★★★★	★★★★☆	67%	35%	2.7	0.26	0.39	5.00

