Ships' Accommodation Solutions

Marine & Offshore Interior Systems

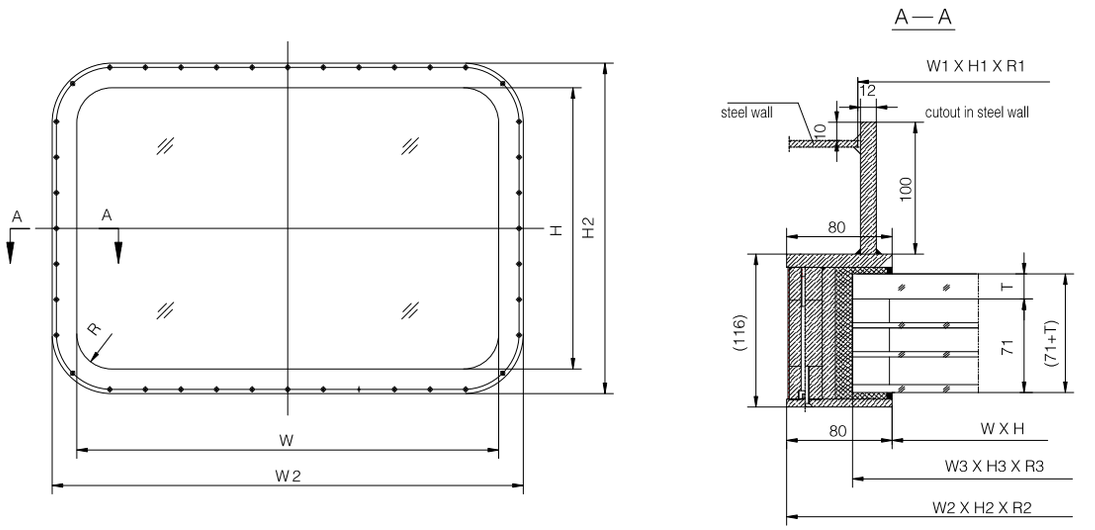
# WINDOWS

www.sasgp.com

# H120 FIREPROOF WINDOW (welding)

261WDF073–00

Suitable for drilling platforms & other marine structures with H120 fireproof requirement, passed the fire test held by Shanghai Far East Firetesting Center with the test report No. FT05154.




| no. | mm nominal size W X H | | mm external size W2 X H2 X R2 | | cutout in steel wall W1 X H1 X R1 | | mm glass size W3 X H3 X R3 | | T mm glass thickness E | F |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 300 X 425 | R50 | 460 X 585 | R130 | 352 X 477 | R76 | 360 X 485 | R80 | 10 | 8 |
| 2 | 355 X 500 | | 515 X 660 | | 407 X 552 | | 415 X 560 | | 10 | 8 |
| 3 | 400 X 560 | | 560 X 740 | | 452 X 612 | | 460 X 620 | | 12 | 8 |
| 4 | 450 X 630 | R100 | 630 X 790 | R180 | 502 X 682 | R126 | 510 X 690 | R130 | 12 | 8 |
| 5 | 500 X 710 | | 660 X 890 | | 552 X 762 | | 560 X 770 | | 15 | 10 |
| 6 | 560 X 800 | | 720 X 960 | | 612 X 852 | | 620 X 860 | | 15 | 10 |
| 7 | 900 X 630 | | 1060 X 790 | | 952 X 682 | | 960 X 690 | | 19 | 12 |
| 8 | 1000 X 710 | | 1160 X 870 | | 1052 X 762 | | 1060 X 770 | | 19 | 12 |
| 9 | 1100 X 800 | | 1260 X 960 | | 1152 X 852 | | 1160 X 860 | | 19 | 15 |
| 10 | 1200 X 800 | | 1360 X 960 | | 1252 X 852 | | 1260 X 860 | | 19 | 15 |

Identification example:

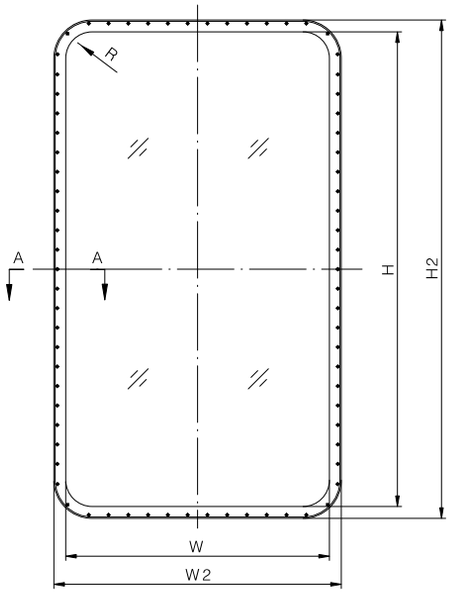
H120 fireproof window with clear size of 1200X800:

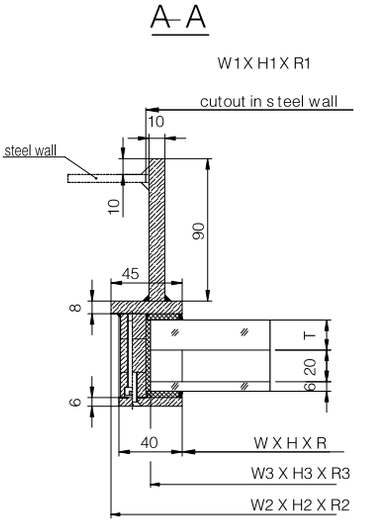
H120 fireproof window 1200X800 261WDF073

# A60 FIREPROOF WINDOW (welding)

261WDF071B2–00

Suitable for accommodations & other marine structures with A60 fireproof requirement, passed the fire test held by Shanghai Far East Firetesting Center with the test report No. FT05029.




| no. | mm nominal size W X H X R | | cutout in steel wall W1 X H1 X R1 | | mm external size W2 X H2 X R2 | | mm glass size W3 X H3 X R3 | | T mm glass thickness E | F |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 300 X 425 | R50 | 352 X 477 | R76 | 390 X 515 | R95 | 340 X 465 | R70 | 10 | 8 |
| 2 | 355 X 500 | | 407 X 552 | | 445 X 590 | | 395 X 540 | | 10 | 8 |
| 3 | 400 X 560 | | 452 X 612 | | 490 X 650 | | 440 X 600 | | 12 | 8 |
| 4 | 450 X 630 | R100 | 502 X 682 | R126 | 540 X 720 | R145 | 490 X 670 | R120 | 12 | 8 |
| 5 | 500 X 710 | | 552 X 762 | | 590 X 800 | | 540 X 750 | | 15 | 10 |
| 6 | 560 X 800 | | 612 X 852 | | 650 X 890 | | 600 X 840 | | 15 | 10 |
| 7 | 900 X 630 | | 952 X 682 | | 990 X 720 | | 940 X 670 | | 19 | 12 |
| 8 | 1000 X 710 | | 1052 X 762 | | 1090 X 800 | | 1020 X 730 | | 19 | 12 |
| 9 | 1100 X 800 | | 1152 X 852 | | 1190 X 890 | | 1140 X 840 | | 19 | 15 |
| 10 | 1200 X 800 | | 1252 X 852 | | 1290 X 890 | | 1240 X 840 | | 19 | 15 |
| 11 | 900 X 1400 | | 952 X 1452 | | 990 X 1490 | | 940 X 1440 | | 19 | 15 |
| 12 | 900 X 1600 | | 952 X 1652 | | 990 X 1690 | | 940 X 1640 | | 19 | 15 |
| 13 | 1000 X 1800 | | 1052 X 1852 | | 1090 X 1890 | | 1040 X 1840 | | 19 | 15 |

Identification example:

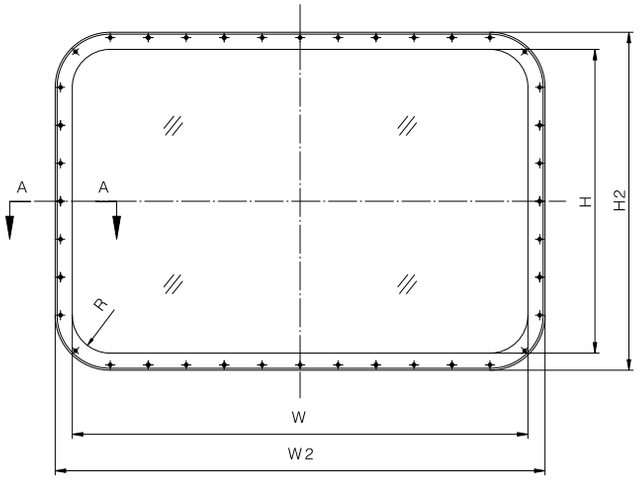
Welding A60 fireproof window with clear size of 1200X800:

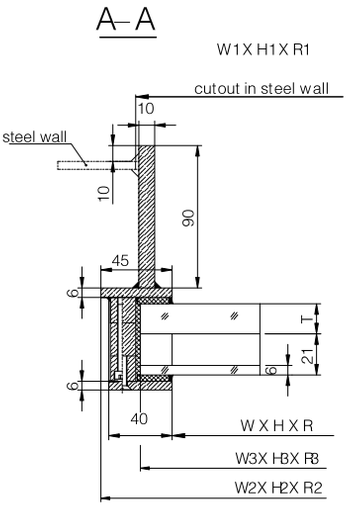
A60 fireproof window 1200X800 261WDF071B2

# A0 FIREPROOF WINDOW (Welding)

261WDF071B–00

Suitable for accommodations & other marine structures with A60 fireproof requirement, passed the fire test held by Shanghai Far East Firetesting Center with the test report No. FT04094,FT04129,FT05136.




| no. | mm nominal size W X H X R | | cutout in steel wall W1 X H1 X R1 | | mm external size W2 X H2 X R2 | | mm glass size W3 X H3 X R3 | | T mm glass thickness E | F |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 300 X 425 | R50 | 352 X 477 | R76 | 390 X 515 | R95 | 340 X 465 | R70 | 10 | 8 |
| 2 | 355 X 500 | | 407 X 552 | | 445 X 590 | | 395 X 540 | | 10 | 8 |
| 3 | 400 X 560 | | 452 X 612 | | 490 X 650 | | 440 X 600 | | 12 | 8 |
| 4 | 450 X 630 | R100 | 502 X 682 | R126 | 540 X 720 | R145 | 490 X 670 | R120 | 12 | 8 |
| 5 | 500 X 710 | | 552 X 762 | | 590 X 800 | | 540 X 750 | | 15 | 10 |
| 6 | 560 X 800 | | 612 X 852 | | 650 X 890 | | 600 X 840 | | 15 | 10 |
| 7 | 900 X 630 | | 952 X 682 | | 990 X 720 | | 940 X 670 | | 19 | 12 |
| 8 | 1000 X 710 | | 1052 X 762 | | 1090 X 800 | | 1020 X 730 | | 19 | 12 |
| 9 | 1100 X 800 | | 1152 X 852 | | 1190 X 890 | | 1140 X 840 | | 19 | 15 |
| 10 | 1200 X 800 | | 1252 X 852 | | 1290 X 890 | | 1240 X 840 | | 19 | 15 |

Identification example:

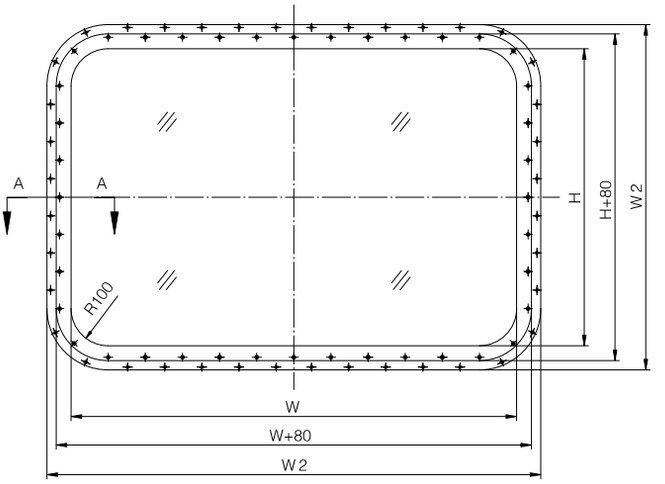
Welding A60 fireproof window with clear size of 1200X800:

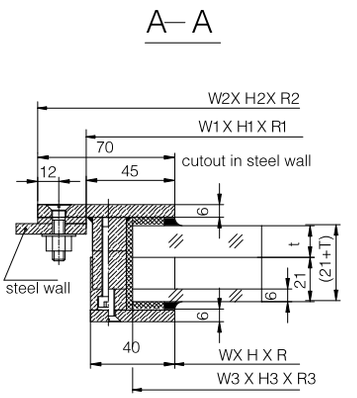
A60 fireproof window 1200X800 261WDF071B

# A0 FIREPROOF WINDOW (Bolted)

261WDF071C–00

Suitable for accommodations & other marine structures with A60 fireproof requirement, passed the fire tests held by Shanghai Far East Firetesting Center with the test report No. FT04094.FT04129.FT05136.




| no. | mm nominal size W X H | | cutout in steel wall W1 X H1 X R1 | | mm external size W2 X H2 X R2 | | mm glass size W3 X H3 X R3 | | T mm glass thickness E | F |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 300 X 425 | R50 | 390 X 515 | R95 | 440 X 565 | R120 | 340 X 465 | R70 | 10 | 8 |
| 2 | 355 X 500 | | 445 X 590 | | 495 X 650 | | 395 X 540 | | 10 | 8 |
| 3 | 400 X 560 | | 490 X 650 | | 540 X 700 | | 440 X 600 | | 12 | 8 |
| 4 | 450 X 630 | R100 | 540 X 720 | R145 | 590 X 770 | R170 | 490 X 670 | R120 | 12 | 8 |
| 5 | 500 X 710 | | 590 X 800 | | 650 X 850 | | 540 X 750 | | 15 | 10 |
| 6 | 560 X 800 | | 650 X 890 | | 700 X 940 | | 600 X 840 | | 15 | 10 |
| 7 | 900 X 630 | | 990 X 720 | | 1040 X 770 | | 940 X 670 | | 19 | 12 |
| 8 | 1000 X 710 | | 1090 X 800 | | 1140 X 850 | | 1020 X 730 | | 19 | 12 |
| 9 | 1100 X 800 | | 1190 X 890 | | 1200 X 940 | | 1140 X 840 | | 19 | 15 |
| 10 | 1200 X 800 | | 1290 X 890 | | 1340 X 940 | | 1240 X 840 | | 19 | 15 |

Identification example:

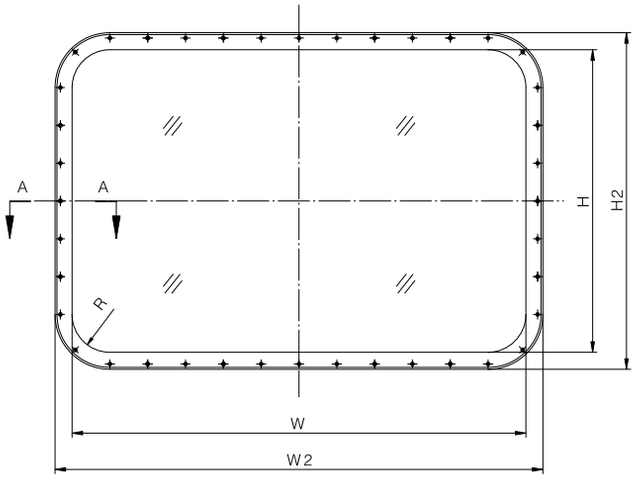
Bolted A60 fireproof window with clear size of1200X800:

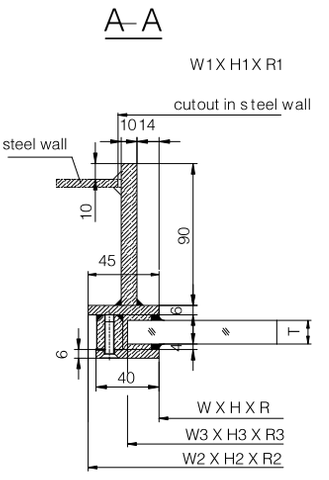
A60 fireproof window 1200X800 261WDF071C

# A60 FIREPROOF SIDE SCUTTLE

261WDF071E–00

Suitable for accommodations & other marine structures with A0 fireproof requirement, passed the fire test held by Shanghai Far East Firetesting Center with the test report No. FT04080.




| no. | mm nominal size W X H | | cutout in steel wall W1 X H1 X R1 | | mm external size W2 X H2 X R2 | | mm glass size W3 X H3 X R3 | | T mm glass thickness E | F |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 300 X 425 | R50 | 352 X 477 | R76 | 390 X 515 | R95 | 340 X 465 | R70 | 10 | 8 |
| 2 | 355 X 500 | | 407 X 552 | | 445 X 590 | | 395 X 540 | | 10 | 8 |
| 3 | 400 X 560 | | 552 X 612 | | 490 X 650 | | 440 X 600 | | 12 | 8 |
| 4 | 450 X 630 | R100 | 502 X 682 | R126 | 540 X 720 | R145 | 490 X 670 | R120 | 12 | 8 |
| 5 | 500 X 710 | | 552 X 762 | | 590 X 800 | | 540 X 750 | | 15 | 10 |
| 6 | 560 X 800 | | 612 X 852 | | 650 X 890 | | 600 X 840 | | 15 | 10 |
| 7 | 900 X 630 | | 952 X 682 | | 990 X 720 | | 940 X 670 | | 19 | 12 |
| 8 | 1000 X 710 | | 1052 X 762 | | 1090 X 800 | | 1020 X 730 | | 19 | 12 |
| 9 | 1100 X 800 | | 1152 X 852 | | 1190 X 890 | | 1140 X 840 | | 19 | 15 |
| 10 | 1200 X 800 | | 1252 X 852 | | 1290 X 890 | | 1240 X 840 | | 19 | 15 |

Identification example:

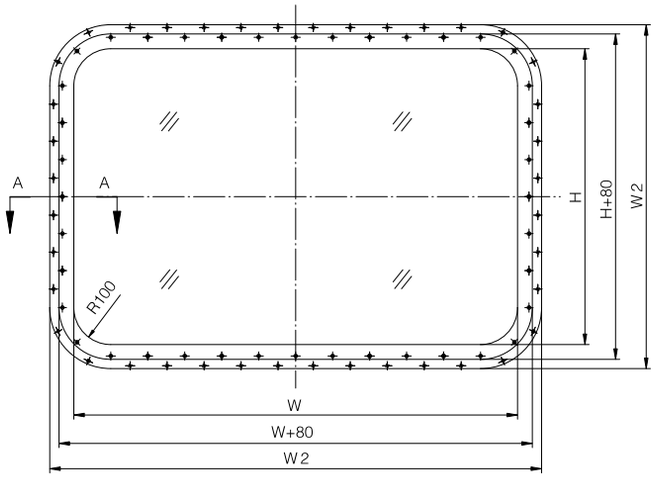
Welding A0 fireproof window with clear size of 1200X800:

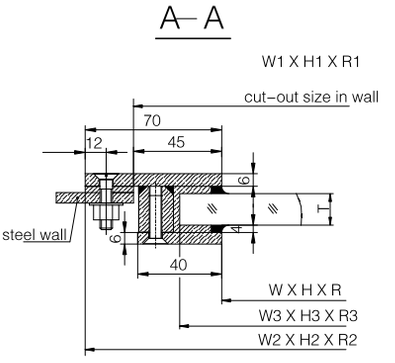
A0 fireproof window 1200X800 261WDF071E

# A60 FIREPROOF SERVICE WINDOW

261WDF071D–00

Suitable for accommodations & other marine structures with A0 fireproof requirement, passed the fire test held by Shanghai Far East Firetesting Center with the test report No. FT04080.




| no. | mm nominal size W X H | | cutout in steel wall W1 X H1 X R1 | | mm external size W2 X H2 X R2 | | mm glass size W3 X H3 X R3 | | T mm glass thickness E | F |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 300 X 425 | R50 | 390 X 515 | R95 | 440 X 565 | R120 | 340 X 465 | R70 | 10 | 8 |
| 2 | 355 X 500 | | 445 X 590 | | 495 X 650 | | 395 X 540 | | 10 | 8 |
| 3 | 400 X 560 | | 490 X 650 | | 540 X 700 | | 440 X 600 | | 12 | 8 |
| 4 | 450 X 630 | R100 | 540 X 720 | R145 | 590 X 770 | R170 | 490 X 670 | R120 | 12 | 8 |
| 5 | 500 X 710 | | 590 X 800 | | 650 X 850 | | 540 X 750 | | 15 | 10 |
| 6 | 560 X 800 | | 650 X 890 | | 700 X 940 | | 600 X 840 | | 15 | 10 |
| 7 | 900 X 630 | | 990 X 720 | | 1040 X 770 | | 940 X 670 | | 19 | 12 |
| 8 | 1000 X 710 | | 1090 X 800 | | 1140 X 850 | | 1020 X 730 | | 19 | 12 |
| 9 | 1100 X 800 | | 1190 X 890 | | 1200 X 940 | | 1140 X 840 | | 19 | 15 |
| 10 | 1200 X 800 | | 1290 X 890 | | 1340 X 940 | | 1240 X 840 | | 19 | 15 |

Identification example:

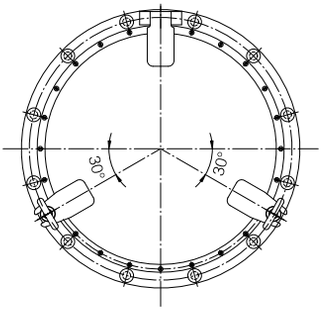
Bolted A0 fireproof window with clear size of1200X800:

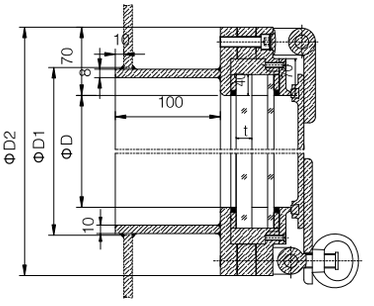
A0 fireproof window 1200X800 261WDF071D

# H120 FIREPROOF WINDOW (welding)

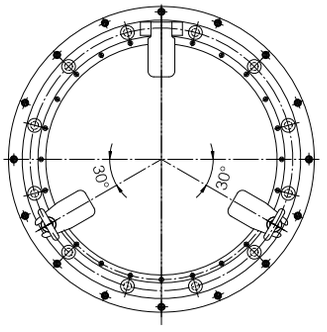
261WDF072–00

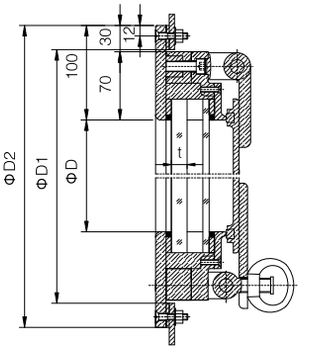
Suitable for accommodations & other marine structures with A60 fireproof requirement,passed the fire test held by Shanghai Far East Firetesting Center with the test report No.FT04129.




Type B welding




Type C bolted

| no. | mm ΦD nominal size | type B(welding) | | type C(bolted) | | t mm glass thickness | |
|---|---|---|---|---|---|---|---|
| | | mm ΦD1 cutout in steel wall | mm ΦD2 external size | mm ΦD1 cutout in steel wall | mm ΦD2 external size | heavy | light |
| 1 | 200 | 253 | 340 | 344 | 400 | 10 | 8 |
| 2 | 250 | 308 | 390 | 394 | 450 | 12 | 8 |
| 3 | 300 | 363 | 440 | 444 | 500 | 15 | 10 |
| 4 | 350 | 413 | 490 | 494 | 550 | 15 | 12 |
| 5 | 400 | 463 | 540 | 544 | 600 | 19 | 12 |
| 6 | 450 | 513 | 590 | 594 | 650 | 19 | 15 |

Identification example:

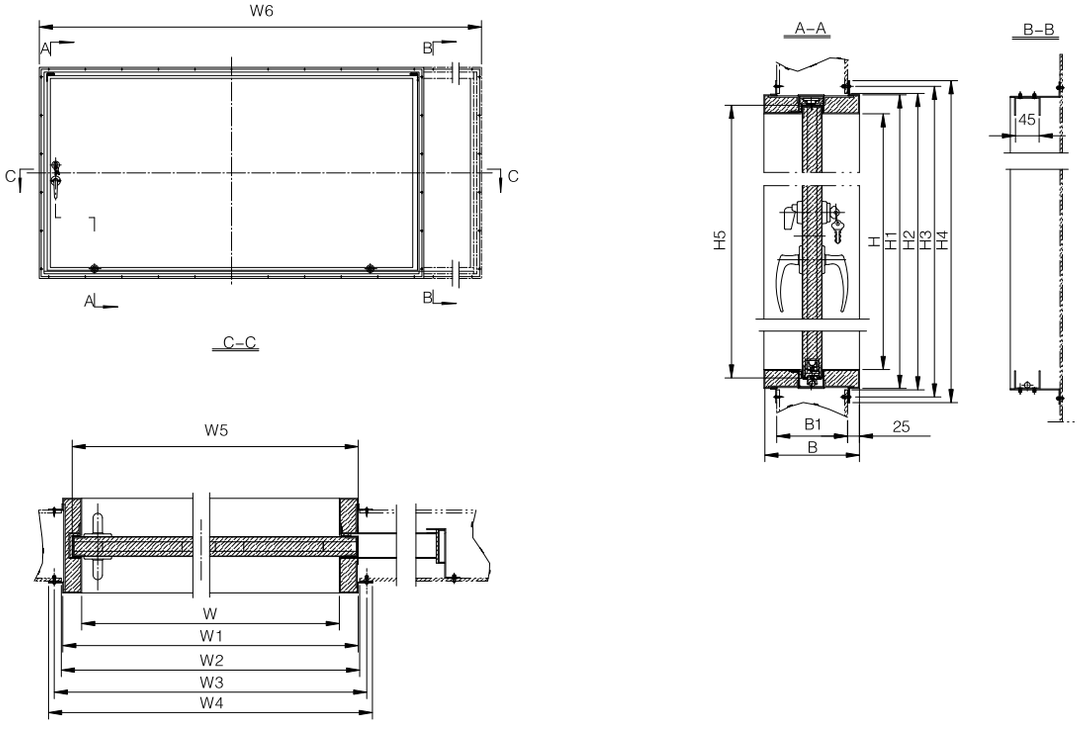
Welding A60 fireproof side scuttle of Φ450:

A60 fireproof side scuttle Φ450 261WDF072B

# A60 FIREPROOF WINDOW (welding)

261XDF027–05

Used for A60 fire–divisions,passed fire test hold by Shanghai Far East fire testing centre with test report No.FT05044.




| no. | nominal size | cutout in steel wall | frame size | | | | | | | leaf size | rail length |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | WxH | W2xH2 | W1xH1 | W3xH3 | W4xH4 | B | B1 | screw qty | screw dia | W5xH5 | W6 |
| 1 | 630x500 | 716x586 | 710x580 | 746x616 | 770x640 | 200 \ 300 | 150 \ 250 | 22 | 6 | 690x536 | 1350 |
| 2 | 900x630 | 986x716 | 980x710 | 1016x746 | 1040x770 | | | 28 | 6 | 960x666 | 1890 |
| 3 | 1100x800 | 1186x886 | 1180x880 | 1216x916 | 1240x940 | | | 32 | 6 | 1160x836 | 2290 |
| 4 | 1400x1000 | 1486x1086 | 1480x1080 | 1516x1116 | 1540x1140 | | | 42 | 6 | 1460x1036 | 2890 |
| 5 | 1800x1100 | 1886x1186 | 1880x1180 | 1916x1216 | 1940x1240 | | | 48 | 6 | 1860x1136 | 3690 |
| 6 | 2300x1200 | 2386x1286 | 2380x1280 | 2416x1316 | 2440x1340 | | | 56 | 6 | 2360x1236 | 4690 |

Identification example:

A60 fireproof service window with clear size of 2300X1200

A60 fireproof service window 2300X1200 261XDF027–05

# RECTANGULAR WINDOW

GB/T5746–2001

Used for the rectangular window of superstructure above freeboard deck and deck house. It meets ISO3903–1993.

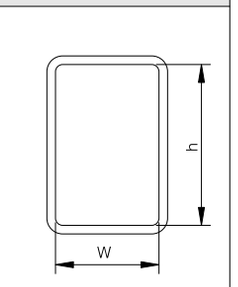
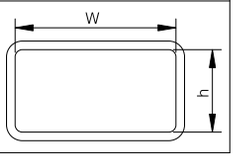
Series

| | | |
|---|---|---|
| N | ordinary | with safety glass |
| P | fire protection | for fire class B |
| H | heating | with electrical heating glass in accordance of ISO3434 |

Type

| | |
|---|---|
| E | heavy |
| F | light |

nominal size code

| code | nominal size W X h | figure |
|---|---|---|
| 1 | 300 X 425 |  |
| 2 | 355 X 500 | |
| 3 | 400 X 560 | |
| 4 | 450 X 630 | |
| 5 | 500 X 710 | |
| 6 | 560 X 800 | |
| 7 | 900 X 630 |  |
| 8 | 1000 X 710 | |
| 9 | 1100 X 800 | |

type

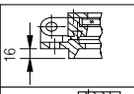
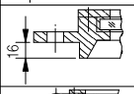
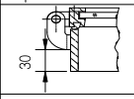
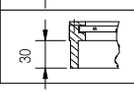
| opening type | opening direction | | | installation: bolted type | installation: welding type | type code | ( nominal size ) E | ( nominal size ) F |
|---|---|---|---|---|---|---|---|---|
| opening | inward "I" | side hinge | left ( L ) | B | – | ILB | 1 ~ 6 | 1 ~ 6 |
| | | | | – | W | ILW | | |
| | | | right ( R ) | B | – | IRB | | |
| | | | | – | W | IRW | | |
| | | up hinge ( T ) | | B | – | ITB | 4 ~ 8 | 4 ~ 9 |
| | | | | – | W | ITW | | |
| | outward "O" | side hinge | left ( L ) | B | – | OLB | 1 ~ 6 | 1 ~ 6 |
| | | | | – | W | OLW | | |
| | | | right ( R ) | B | – | ORB | | |
| | | | | – | W | ORW | | |
| | | up hinge ( T ) | | B | – | OTB | 4 ~ 8 | 4 ~ 9 |
| | | | | – | W | OTW | | |
| fixed | – | | | B | – | NOB | 1 ~ 8 | 1 ~ 9 |
| | | | | – | W | NOW | | |

| rectangular window | | glass thickness | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| series | type | nominal size code | | | | | | | | | | | | | | | | | |
| | | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | |
| N | E | 10 | ( 15 ) | 10 | ( 15 ) | 12 | ( 19 ) | 12 | ( 19 ) | 15 | – | 15 | – | 19 | – | 19 | – | – | – |
| | F | 8 | ( 12 ) | 8 | ( 12 ) | 8 | ( 12 ) | 8 | ( 12 ) | 10 | ( 15 ) | 10 | ( 15 ) | 12 | ( 19 ) | 12 | ( 19 ) | 15 | – |
| P | E | ISO 5797–1 ( B–0, B–15 ) | | | | | | | | | | | | | | | | | |
| | F | | | | | | | | | | | | | | | | | | |
| H | E | ISO 3434 | | | | | | | | | | | | | | | | | |
| | F | | | | | | | | | | | | | | | | | | |

# RECTANGULAR WINDOW

GB/T5746–2001

convex shoulder high

| | | | processing height | actual height |
|---|---|---|---|---|
| bolted type | opening |  | 16 | up to buyer's choice |
| | fixed |  | | |
| welding type | opening |  | 30 | |
| | fixed |  | | |

material & composition code

| type | installation | material | | | material code |
|---|---|---|---|---|---|
| | | main frame | glass holder | retaining frame | |
| opening | bolted | cu(1) | cu(1) | cu(1) | 111 |
| | | At(2) | At(2) | At(2) | 222 |
| | | Al(3) | Al(3) | Al(3) | 333 |
| | welding | At(2) | cu(1) | cu(1) | 211 |
| | | At(2) | At(2) | cu(1) | 221 |
| | | At(2) | At(2) | At(2) | 222 |
| | | At(2) | Al(3) | Al(3) | 233 |
| fixed | bolted | cu(1) | N(0) | cu(1) | 101 |
| | | At(2) | N(0) | At(2) | 202 |
| | | Al(3) | N(0) | Al(3) | 303 |
| | welding | At(2) | N(0) | cu(1) | 201 |
| | | At(2) | N(0) | At(2) | 202 |
| | | At(2) | N(0) | Al(3) | 203 |
| | | Al(3) | N(0) | Al(3) | 303 |

glass code

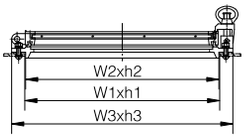
| electricity | | | overheating protection | ( W/dm²) min. power load | | |
|---|---|---|---|---|---|---|
| | | | | 7 | 12 | 17 |
| power | v | Hz | | code | | |
| DC | 24 | – | G | 7G01 | 12G01 | 17G01 |
| | | | S | 7S01 | 12S01 | 17S01 |
| | 110 | – | G | 7G02 | 12G02 | 17G02 |
| | | | S | 7S02 | 12S02 | 17S02 |
| | 220 | – | G | 7G03 | 12G03 | 17G03 |
| | | | S | 7S03 | 12S03 | 17S03 |
| AC | 115 | 50 | G | 7G11 | 12G11 | 17G11 |
| | | | S | 7S11 | 12S11 | 17S11 |
| | | 60 | G | 7G12 | 12G12 | 17G12 |
| | | | S | 7S12 | 12S12 | 17S12 |
| | 220 | 50 | G | 7G13 | 12G13 | 17G13 |
| | | | S | 7S13 | 12S13 | 17S13 |
| | | 60 | G | 7G14 | 12G14 | 17G14 |
| | | | S | 7S14 | 12S14 | 17S14 |
| AC | 115 | 50 | G | 7G31 | 12G31 | 17G31 |
| | | | S | 7S31 | 12S31 | 17S31 |
| | | 60 | G | 7G32 | 12G32 | 17G32 |
| | | | S | 7S32 | 12S32 | 17S32 |
| | 220 | 50 | G | 7G33 | 12G33 | 17G33 |
| | | | S | 7S33 | 12S33 | 17S33 |
| | | 60 | G | 7G34 | 12G34 | 17G34 |
| | | | S | 7S34 | 12S34 | 17S34 |
| | 220/380 | 50 | G | 7G35 | 12G35 | 17G35 |
| | | | S | 7S35 | 12S35 | 17S35 |
| | | 60 | G | 7G36 | 12G36 | 17G36 |
| | | | S | 7S36 | 12S36 | 17S36 |
| | 440 | 50 | G | 7G37 | 12G37 | 17G37 |
| | | | S | 7S37 | 12S37 | 17S37 |
| | | 60 | G | 7G38 | 12G38 | 17G38 |
| | | | S | 7S38 | 12S38 | 17S38 |

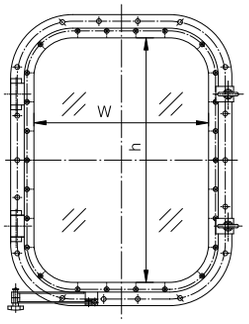
Note: 1.G for central control,S for individual control, see ISO3434–1992 5.4
2.More considerations taken for near polar voyage.

# RECTANGULAR WINDOW

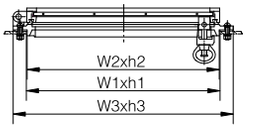
GB/T5746–2001

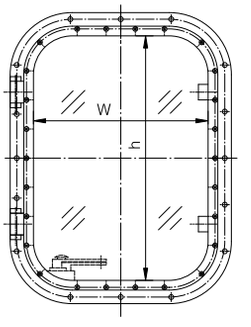
Figure of rectangular window



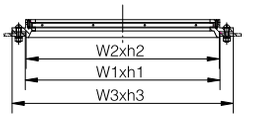



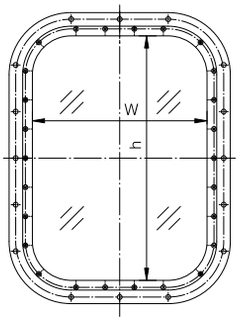

ILB(IRB)



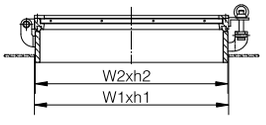



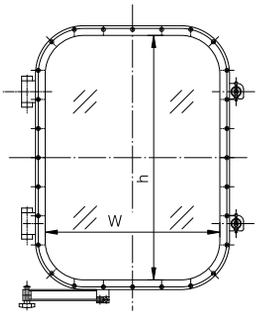

OLB(ORB)



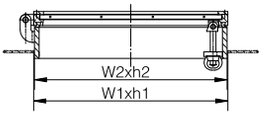



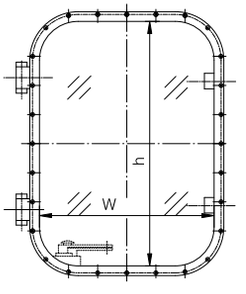

NOB



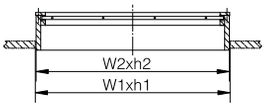



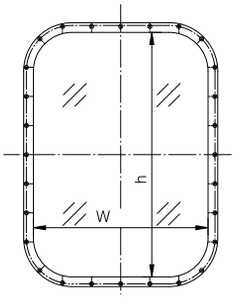

ILW(IRW)



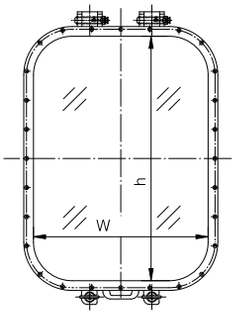



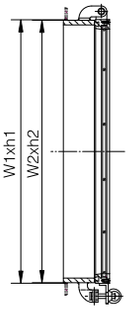

OLW(ORW)



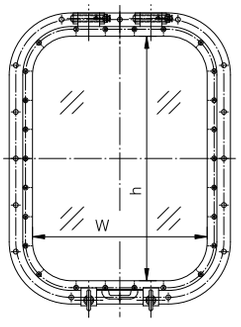



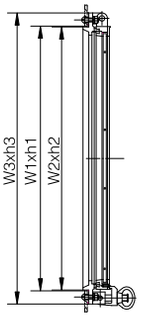

NOW




ITW(OTW)




ITB(OTB)

## RECTANGULAR WINDOW

GB/T5746–2001

| series | type | code | nominal size W X h | cutout in steel wall W1 X h1 | r | mm size of frame W2 X h2 | W3 X h3 | opening |
|---|---|---|---|---|---|---|---|---|
| N<br>P<br>H | E<br>F | 1 | 300 X 425 | 352 X 477 | 76 | 348 X 473 | 430 X 555 | |
| | | 2 | 355 X 500 | 407 X 552 | 76 | 403 X 548 | 485 X 630 | ILB ILW |
| | | 3 | 400 X 560 | 452 X 612 | 76 | 448 X 608 | 530 X 690 | IRB IRW |
| | | 4 | 450 X 630 | 502 X 682 | 126 | 498 X 678 | 580 X 760 | ITB ITW |
| | | 5 | 500 X 710 | 552 X 762 | 126 | 548 X 758 | 630 X 840 | OLB OLW |
| | | 6 | 560 X 800 | 612 X 852 | 126 | 608 X 848 | 690 X 930 | ORB ORW |
| | | 7 | 900 X 630 | 952 X 682 | 126 | 948 X 678 | 1030 X 760 | OTB OTW |
| | | 8 | 1000 X 710 | 1052 X 762 | 126 | 1048 X 758 | 1130 X 840 | NOB NOW |
| | | 9 | 1100 X 800 | 1152 X 852 | 126 | 1148 X 848 | 1230 X 930 | |

Identification example:

1.Normal(N)

heavy(E)，nominal size 450×630，convex shoulder height 16，hinged，left inward opening，bolted(ILB)，material combination 111，safety glass(Y1)：

Rectangular window N–E4×16–ILB–111–Y1 GB/T5746–1996

2.Fireproof（P）

light（F），nominal size 450×630，convex shoulder height 16，upper hinged， inward opening， bolted(ITB)，material combination,111 B–15 fireproof glass：

Rectangular window P–F4×16–ITB–111–B15 GB/T5746–1996

3.Heating（H）

light（F），nominal 450×630，convex shoulder height 30，fixed， welding（NOW），material combination 233，with overheating protection，power load 12W/$m^2$，220V，60HZ：

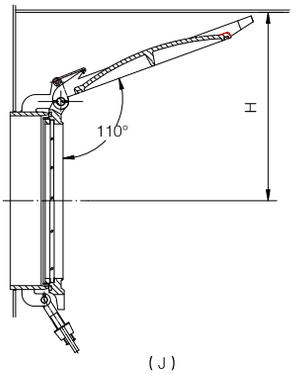
Rectangular window H–F4×16–NOW–233–12S14 GB/T5746–1996

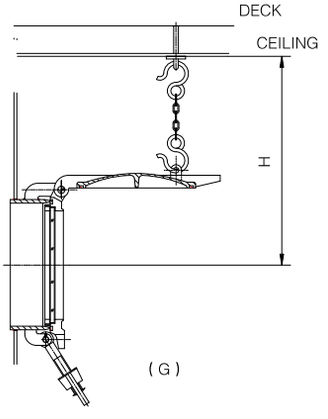
# SIDE SCUTTLE

GB/T14413–1993

Used for sea–going ship and warships could used for inland ship.

| name | type | size of clear D (mm) | opening | | installation | material code | | deadlight opening | glass | application |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | opening | fixed | | bolted | welding | | | |
| heavy | A | 200<br>250<br>300<br>350<br>400 | ( L ) | fixed ( N ) | bolted ( B ) welding ( W ) | 112 | 212<br>222 | ( G ) | transparent (Y1) frosting (Y2) | with watertight & gastight requirements above full load waterline, below freeboard |
| | | | ( R ) | | | | | | | |
| medium | B | 200<br>250<br>300<br>350<br>400<br>450 | ( S ) | | | 112<br>222<br>333 | 212<br>222<br>233 | ( J ) | | Above freeboard, first deck for cargo vessels |
| htlig | C | | ( L ) | | | 220<br>330 | 210<br>220 | | | Above freeboard for passenger vessels. |
| | | | ( R ) | | | 110 | 230 | | | |




material composition code

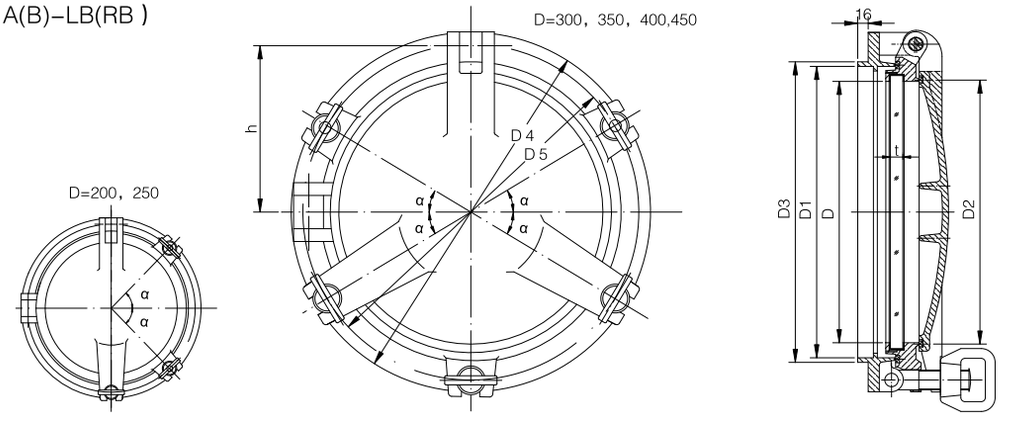
| type | install type | material | | | material code |
|---|---|---|---|---|---|
| | | main frame | glass holder & retaining frame | deadlight | |
| A | bolted | cu(1) | cu(1) | At(2) | 112 |
| | welding | At(2) | cu(1) | At(2) | 212 |
| | | At(2) | At(2) | At(2) | 222 |
| B | bolted | cu(1) | cu(1) | At(2) | 112 |
| | | At(2) | At(2) | At(2) | 222 |
| | | Al(3) | Al(3) | Al(3) | 333 |
| | welding | At(2) | cu(1) | At(2) | 212 |
| | | At(2) | At(2) | At(2) | 222 |
| | | At(2) | Al(3) | Al(3) | 233 |
| C | bolted | At(2) | At(2) | –– | 220 |
| | | Al(3) | Al(3) | –– | 330 |
| | | cu(1) | cu(1) | –– | 110 |
| | welding | At(2) | cu(1) | –– | 210 |
| | | At(2) | At(2) | –– | 220 |
| | | At(2) | Al(3) | –– | 230 |

| D clear size | | 200 | 250 | 300 | 350 | 400 | 450 |
|---|---|---|---|---|---|---|---|
| min. distance between the side scuttle center and ceiling H | ( J ) | 350 | 400 | 450 | 500 | 540 | 580 |
| | ( G ) | up to buyer's choice | | | | | |

## SIDE SCUTTLE

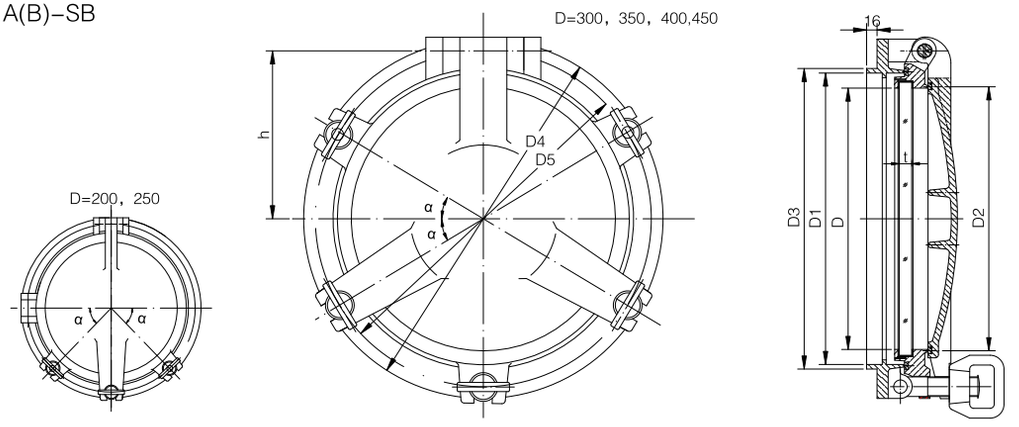
GB/T14413–1993

Type A(B)–LB(RB )



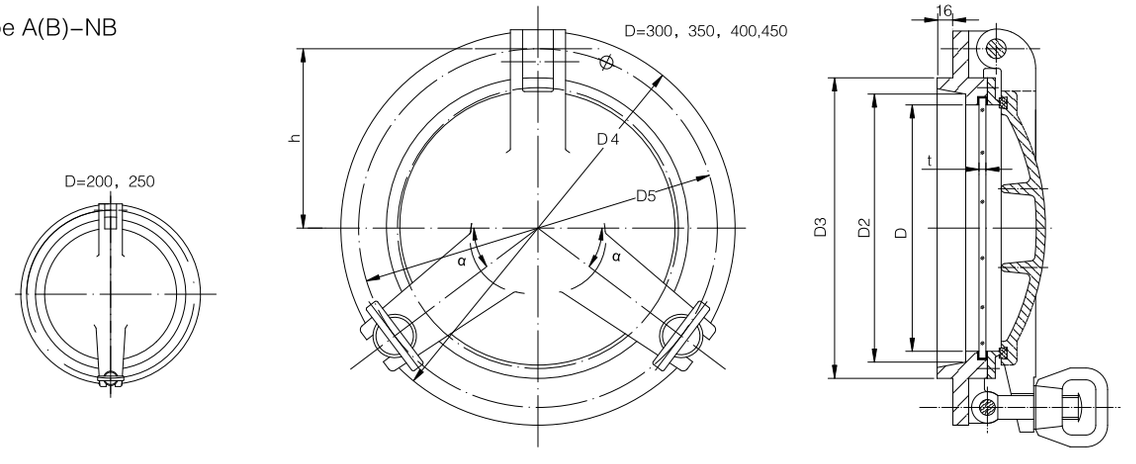

Type A(B)–LB ( RB )

Type A(B)–SB




Type A(B)–SB

Type A(B)–NB

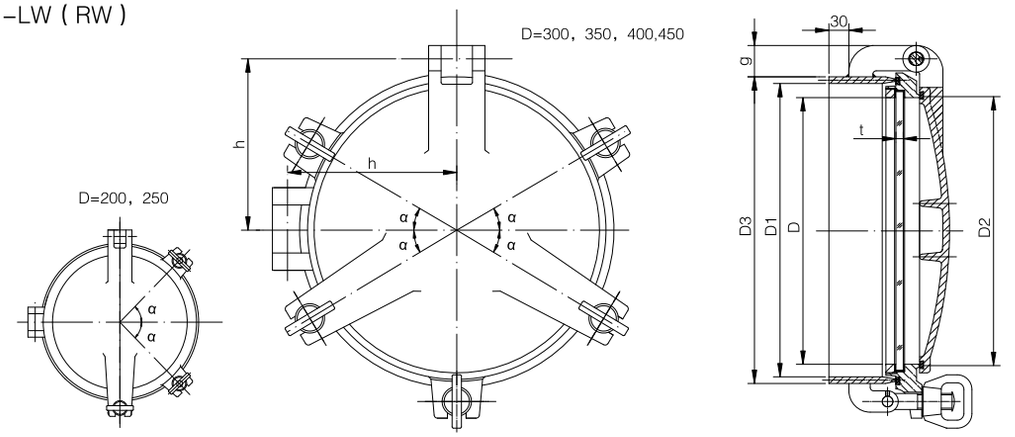



Type A(B)–NB

# SIDE SCUTTLE

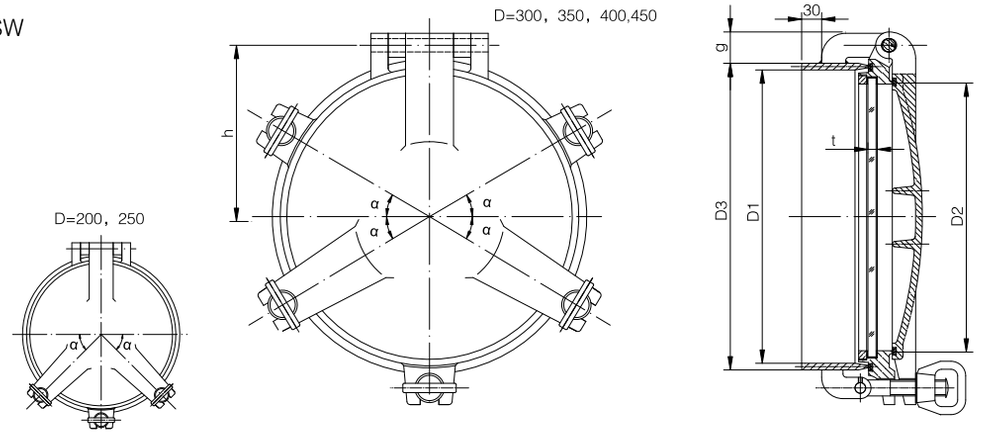
GB/T14413–1993

Type A(B)––LW ( RW )



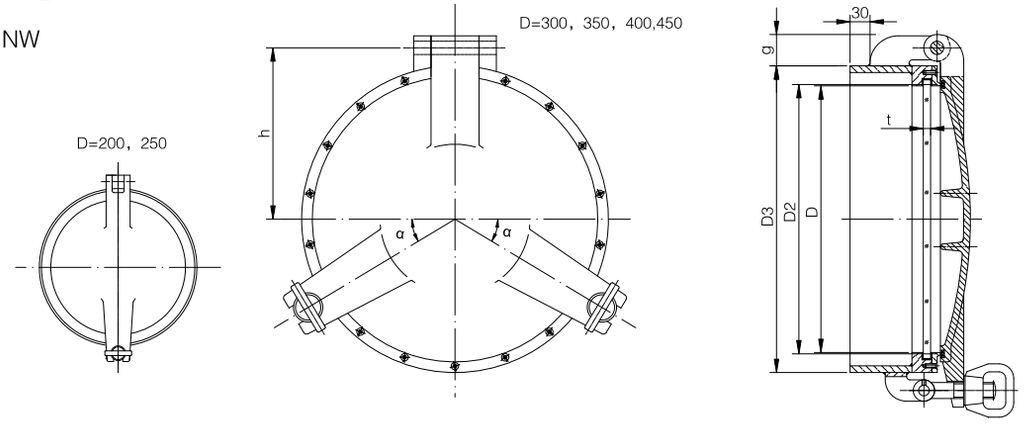

Type A(B)–LW ( RW )

Type A(B)––SW




Type A(B)–SW

Type A(B)–NW

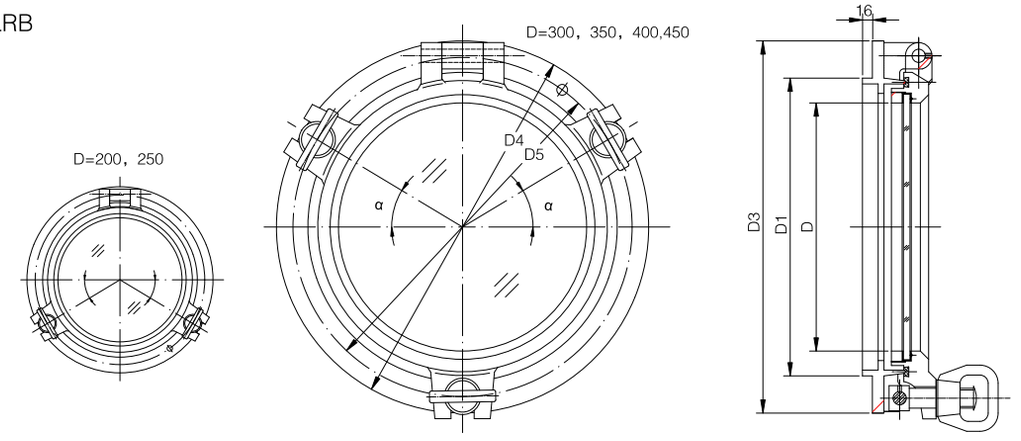



Type A(B)–NW

## SIDE SCUTTLE

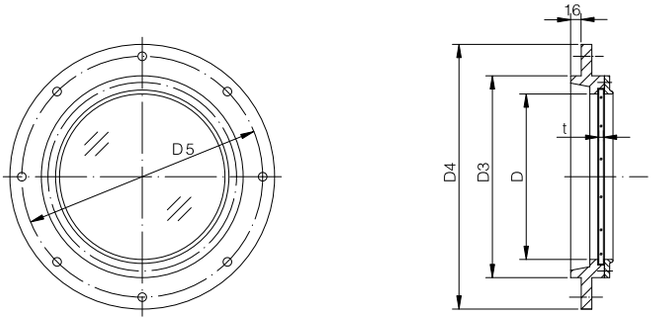
GB/T14413–1993

Type C–LRB



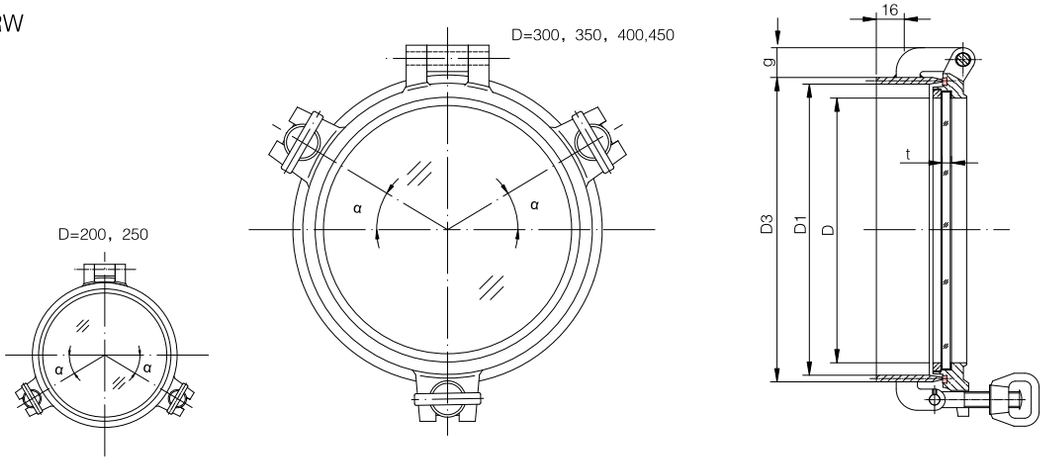

Type C–LRB

Type C–NB




Type C–NB

Type C–LRW

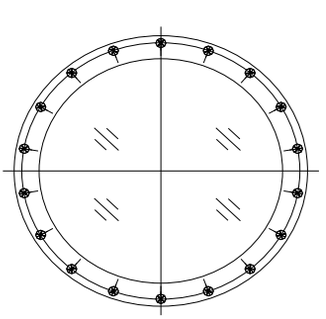


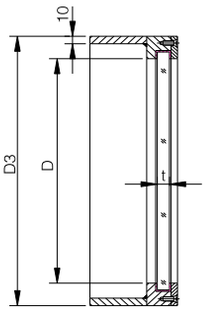

Type C–LRW

# SIDE SCUTTLE

GB/T14413–1993

Type C–NW






Type C–NW

(mm) heavy & medium dimension

| clear size D | D1 | D2 | D3 | D4 | D5 | h | t | | gmax | bolt | | cutout in steel wall |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | A | B | | whorl | qut | |
| Φ200 | Φ245 | Φ204 | Φ250 | Φ350 | Φ310 | 155 | 10 | 8 | 50 | M16(12) | 8 | 253 |
| Φ250 | Φ295 | Φ254 | Φ305 | Φ400 | Φ364 | 182 | 12 | 8 | 47.5 | M16 | 8 | 308 |
| Φ300 | Φ350 | Φ304 | Φ360 | Φ450 | Φ414 | 207 | 15 | 10 | 45 | M16 | 12 | 363 |
| Φ350 | Φ400 | Φ354 | Φ410 | Φ500 | Φ464 | 232 | 15 | 12 | 45 | M18 | 12 | 413 |
| Φ400 | Φ450 | Φ404 | Φ460 | Φ550 | Φ514 | 257 | 19 | 12 | 45 | M18 | 12 | 463 |
| Φ450 | Φ500 | Φ454 | Φ510 | Φ600 | Φ564 | 282 | – | 15 | 45 | M20 | 12 | 513 |

(mm) light dimension

| clear size D | D1 | D2 | D3 | D4 | h | t | gmax | bolt | | cutout in steel wall |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | whorl | qut | |
| Φ200 | Φ245 | Φ250 | Φ350 | Φ310 | 155 | 6 | 50 | M12 | 8 | 253 |
| Φ250 | Φ295 | Φ305 | Φ400 | Φ364 | 182 | 6 | 47.5 | M16 | 8 | 308 |
| Φ300 | Φ350 | Φ360 | Φ450 | Φ414 | 207 | 8 | 45 | M16 | 12 | 363 |
| Φ350 | Φ400 | Φ410 | Φ500 | Φ464 | 232 | 8 | 45 | M18 | 12 | 413 |
| Φ400 | Φ450 | Φ460 | Φ550 | Φ514 | 257 | 10 | 45 | M18 | 12 | 463 |
| Φ450 | Φ500 | Φ510 | Φ600 | Φ564 | 282 | 10 | 45 | M20 | 12 | 513 |

Identification example:

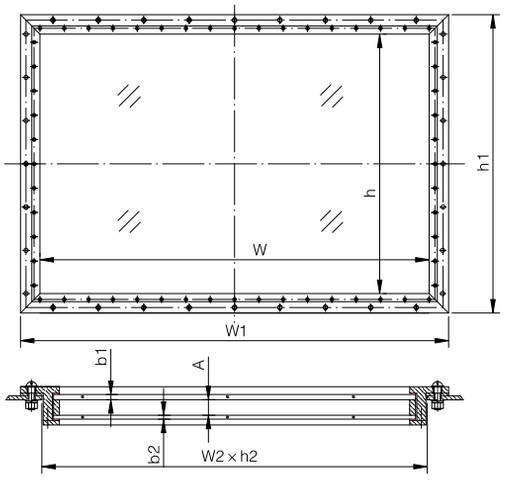
light side scuttle,clear size of 400，welding,fixed（NW），steel coaming,aluminium glass holder、plain safety glass,without deadlight：

Side scuttle C400–NW–230–Y1 GB/T14413–93

# ALUMINIUM SOUNDPROOF HOLLOW WINDOW

CB/T3917–1999 (ZBU26003–89)

Used for the cabin rooms which need soundproof, heat insulation and keeping temperature.




| code | type |
|---|---|
| G | safety glass |
| P | ordinary glass |
| J | soundproof glass |
| C | dark brown safety glass |

| no. | mm clear size W X h | mm outline size W1 X h1 | cutout in steel wall W2 X h2 | glass thickness b1 | hollow A | glass thickness b2 | soundproof lay TL(dB) | bolt qty | bolt diameter | weight kg |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 300 X 425 | 420 X 545 | 352 X 477 | 6 | 6 | 6 | 29 | 14 | M12 | 10.0 |
| 2 | 300 X 425 | 420 X 545 | 352 X 477 | 6 | 9 | 6 | 30.5 | 14 | M12 | 10.0 |
| 3 | 355 X 500 | 475 X 620 | 407 X 552 | 6 | 6 | 6 | 29 | 16 | M12 | 15.6 |
| 4 | 355 X 500 | 475 X 620 | 407 X 552 | 6 | 9 | 6 | 31.5 | 16 | M12 | 16.2 |
| 5 | 400 X 560 | 520 X 680 | 452 X 612 | 6 | 6 | 6 | 31.5 | 18 | M12 | 18.2 |
| 6 | 400 X 560 | 520 X 680 | 452 X 612 | 6 | 9 | 6 | 31 | 18 | M12 | 18.6 |
| 7 | 450 X 630 | 570 X 750 | 502 X 682 | 6 | 9 | 6 | 30.5 | 20 | M12 | 21.2 |
| 8 | 500 X 710 | 620 X 830 | 552 X 762 | 6 | 9 | 6 | 31.8 | 22 | M12 | 25.3 |
| 9 | 900 X 630 | 1020 X 750 | 952 X 682 | 6 | 12 | 6 | 35 | 26 | M12 | 29.4 |
| 10 | 900 X 630 | 1020 X 750 | 952 X 682 | 8 | 16 | 6 | 31 | 26 | M12 | 33.2 |
| 11 | 900 X 630 | 1020 X 750 | 952 X 682 | 8 | 24 | 6 | 35 | 26 | M12 | 34.0 |
| 12 | 1000 X 800 | 1120 X 920 | 1052 X 852 | 8 | 16 | 6 | 34 | 32 | M12 | 45.9 |
| 13 | 1000 X 800 | 1120 X 920 | 1052 X 852 | 8 | 24 | 6 | 33 | 32 | M12 | 46.7 |
| 14 | 1200 X 800 | 1320 X 920 | 1252 X 852 | 8 | 24 | 6 | 34 | 34 | M12 | 54.4 |
| 15 | 1400 X 800 | 1520 X 920 | 1452 X 852 | 8 | 24 | 6 | 33 | 36 | M12 | 59.2 |
| 16 | 1600 X 1000 | 1720 X 1120 | 1652 X 1052 | 8 | 24 | 6 | 32 | 40 | M12 | 81.3 |
| 17 | 1800 X 1200 | 1920 X 1320 | 1852 X 1252 | 8 | 24 | 6 | 30.52 | 44 | M12 | 104.5 |

Identification example:

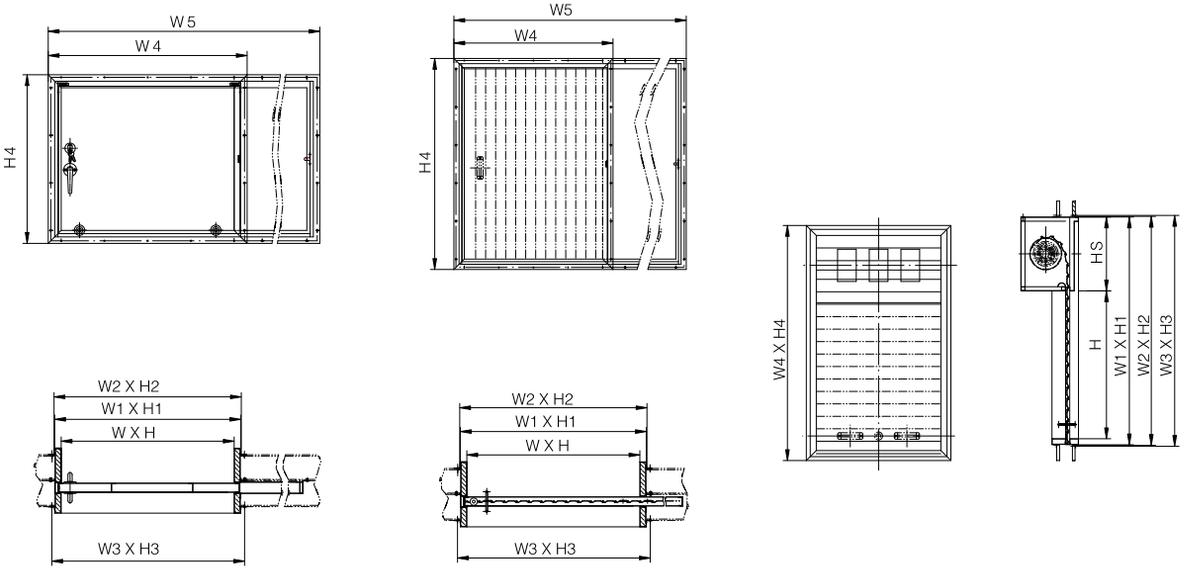
Aluminium soundproof hollow window clear size of 1000X800,A 24mm：

Aluminium soundproof hollow window 1000X800X24G ZBU26003–89

# FIREPROOF SERVICE WINDOW

CB*3288–1987

Used for galley, pantry, store and shop etc.




Type A ––sliding

Type B –– sliding

Type C –– rolling

| type | clear size W X H | cutout size W2 X H2 | | frame size W1 X H1 | | frame size W3 X H3 | | frame size W4 X H4 | | rail W5 | length HS | frame width b | | frame width b1 | | weight Kg steel | | | weight Kg aluminium | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A,B | C | A,B | C | A,B | C | A,B | C | A,B | C | A,B | C | A,B | C | A | B | C | A | B | C |
| A | 630x500 | 696x566 | 696x786 | 690x560 | 690x780 | 720x590 | 720x810 | 750x620 | 750x840 | 1350 | 200 | 180 | 300 | 120 | 240 | 31.8 | 26.9 | 43.1 | 16.2 | 12.7 | 23.5 |
| | 900x630 | 966x696 | 966x916 | 960x690 | 960x910 | 990x720 | 990x940 | 1020x750 | 1020x970 | 1890 | 200 | | | | | 47.4 | 38.2 | 54.0 | 23.2 | 17.7 | 28.4 |
| B | 1100x800 | 1167x867 | 1167x1087 | 1160x860 | 1160x1080 | 1190x890 | 1190x1110 | 1220x920 | 1220x1140 | 2290 | 200 | 220 | | 160 | | 62.6 | 52.0 | 65.1 | 31.7 | 23.7 | 33.8 |
| | 1400x1000 | 1467x1067 | 1467x1367 | 1460x1060 | 1460x1360 | 1490x1090 | 1490x1390 | 1520x1120 | 1520x1420 | 2890 | 300 | | | | | 86.8 | 69.3 | 95.5 | 44.5 | 31.0 | 46.7 |
| C | 1800x1100 | 1868x1168 | 1868x1468 | 1860x1160 | 1860x1460 | 1890x1190 | 1890x1490 | 1920x1220 | 1920x1520 | 3690 | 300 | 260 | 360 | 200 | 300 | 115.2 | 91.9 | 113.8 | 59.2 | 40.6 | 53.7 |
| | 2300x1200 | 2368x1268 | 2368x1568 | 2360x1260 | 2360x1560 | 2390x1290 | 2390x1590 | 2420x1320 | 2420x1620 | 4690 | 300 | | | | | 148.8 | 116.5 | 136.6 | 76.5 | 51.0 | 63.0 |

Identification example:

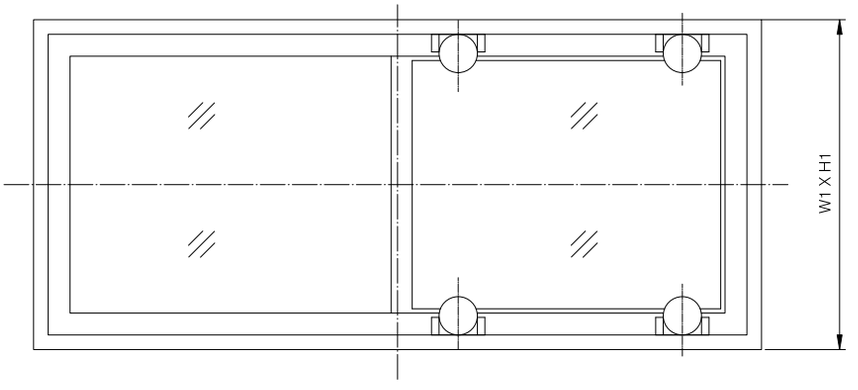
Sliding fire proof service window with clear size of 1100X800

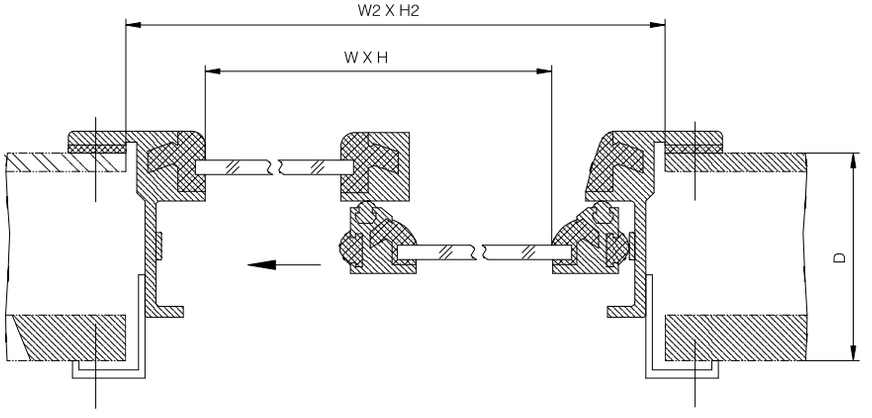
Fireproof service window A1100X800 CB*3288–1987.

# ALUMINIUM SLIDING WINDOW

261XDF005–00

With good tightness,widely used for various ships.




| type | clear size W X H | external size W1 X H1 | cutout size W2 X H2 | round angle window | lining thickness D |
|---|---|---|---|---|---|
| AF AY | 500 X 300 | 600 X 400 | 558 X 358 | R90 | 80~120 |
| | 700 X 400 | 800 X 500 | 758 X 458 | | |
| | 800 X 500 | 900 X 600 | 858 X 558 | | |
| | 900 X 600 | 1000 X 700 | 958 X 658 | | |
| | 1000 X 700 | 1100 X 800 | 1058 X 758 | | |
| | 1200 X 800 | 1300 X 900 | 1258 X 858 | | |
| | 1400 X 800 | 1500 X 900 | 1458 X 858 | | |

| type | code |
|---|---|
| square angle | AF |
| round angle | AY |

Identification example:

Aluminium sliding window with clear size of 700X400, depth of 100, square angle:

Aluminium sliding window AF700X400–100 261XDF005–00

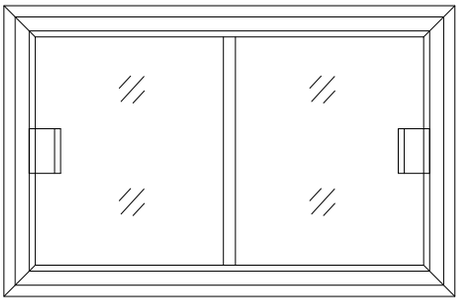
# LIGHT ALUMINIUM DOUBLE LEAF SLIDING WINDOW

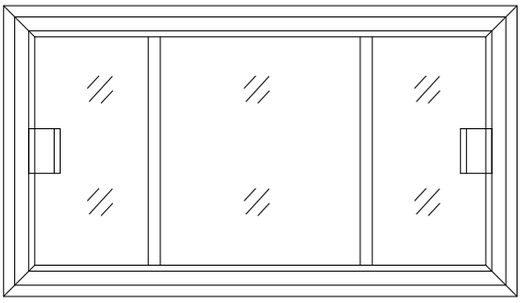
261XDF006–00

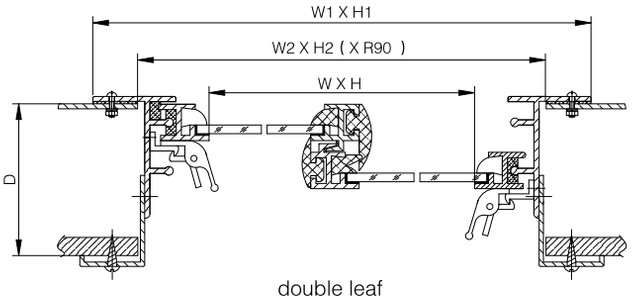
With good tightness, used for yacht and ferry.

| type A | double leaf | L<br>R |
|---|---|---|
| type B | triple leaf | middle part fixed |

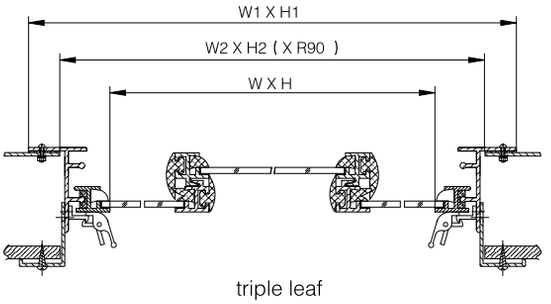
| code | Y | F |
|---|---|---|
| type | round angle<br>cutout in steel wall R90 | square angle |








double leaf




triple leaf

| type | mm<br>clear size<br>W X H | mm<br>external size<br>W1 X H1 | cutout in steel wall<br>W2 X H2 | lining thickness<br>D | weight<br>Kg |
|---|---|---|---|---|---|
| A | 600 X 300 | 726 X 426 | 682 X 382 | 55~120 | 8.2 |
| | 700 X 400 | 826 X 526 | 782 X 482 | | 11.4 |
| | 800 X 500 | 926 X 626 | 882 X 582 | | 15.2 |
| | 900 X 600 | 1026 X 726 | 982 X 682 | | 18.6 |
| | 1000 X 600 | 1126 X 726 | 1082 X 682 | | 21.7 |

| type | mm<br>clear size<br>W X H | mm<br>external size<br>W1 X H1 | cutout in steel wall<br>W2 X H2 | lining thickness<br>D | weight<br>Kg |
|---|---|---|---|---|---|
| B | 1100 X 500 | 1226 X 626 | 1182 X 582 | 55~120 | 11.1 |
| | 1200 X 500 | 1326 X 626 | 1282 X 582 | | 15.2 |
| | 1400 X 600 | 1526 X 726 | 1482 X 682 | | 21.4 |
| | 1600 X 700 | 1726 X 826 | 1682 X 782 | | 26.7 |
| | 1800 X 700 | 1926 X 826 | 1882 X 782 | | 28.4 |

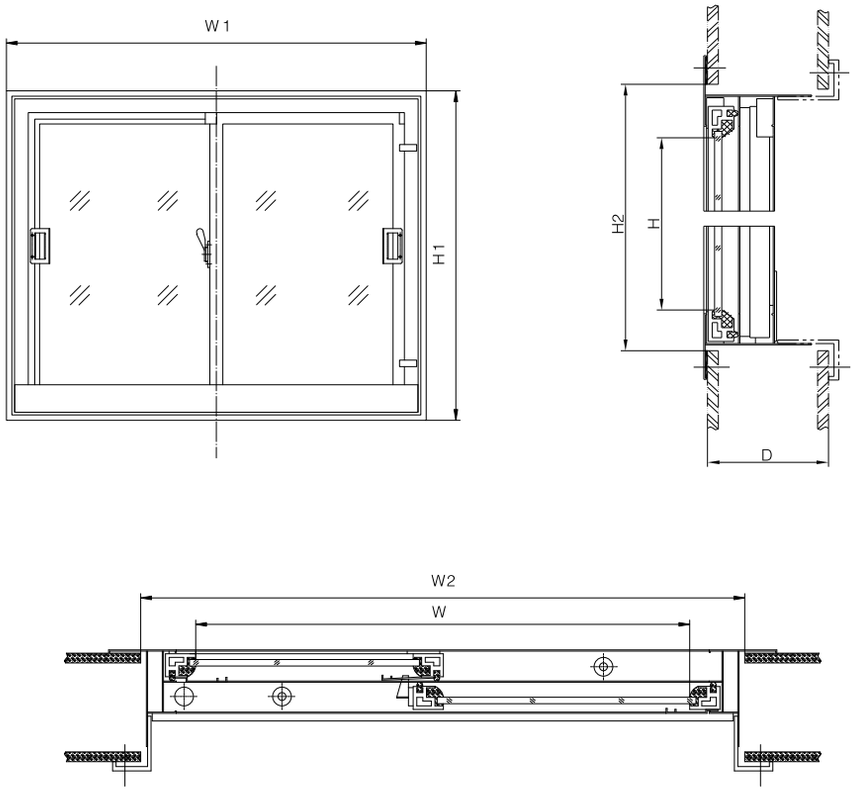
Identification example:

Light aluminium triple leaf sliding window with clear size of 1100 × 800, square angle：

Light aluminium triple leaf sliding window BF1100 × 800 261XDF006

# ALUMINIUM DOUBLE LEAF SLIDING WINDOW

261XDF028–00




| clear size<br>W X H | external size<br>W1 X H1 | cutout size<br>W2 X H2 | lining thickness<br>D | weight<br>Kg |
|---|---|---|---|---|
| 500 X 300 | 644 X 444 | 600 X 400 | 80–120 | 7.8 |
| 700 X 400 | 844 X 544 | 800 X 500 | | 9.2 |
| 800 X 500 | 944 X 644 | 900 X 600 | | 12.4 |
| 900 X 600 | 1044 X 744 | 1000 X 700 | | 15.7 |
| 1000 X 700 | 1144 X 844 | 1100 X 800 | | 18.4 |

Identification example:

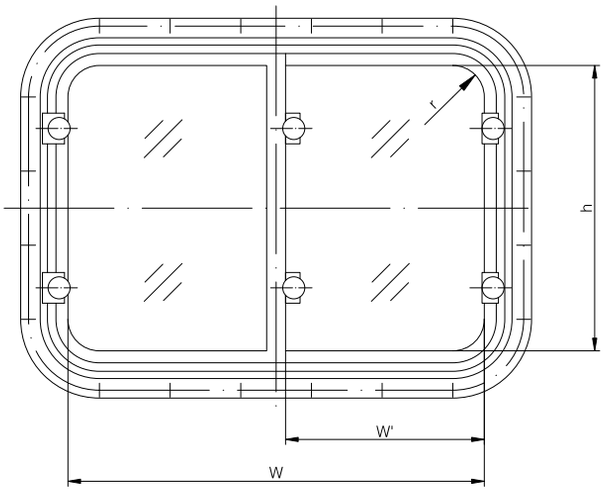
Aluminium double leaf sliding window with clear size of 700 X 400 and frame depth of 100.

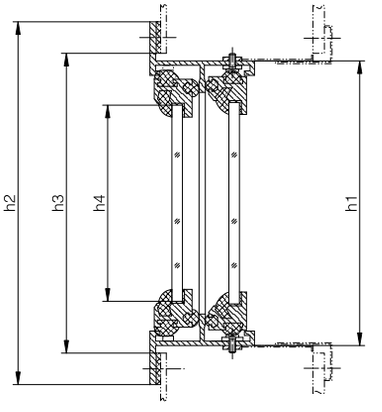
Aluminium double leaf sliding window 700 X 400–100 261XDF028

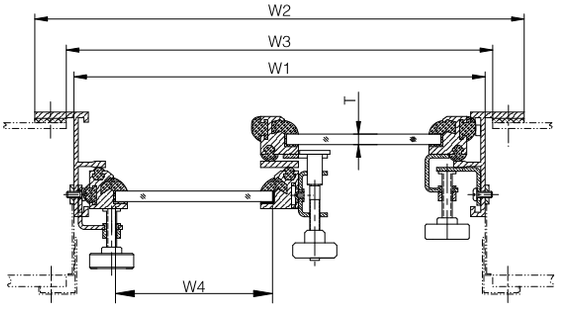
# ALUMINIUM SLIDING WINDOW

CB/T3765–1996

The sliding window could be adopted at the wheelhouse and superstructure above the freeboard deck of the vessels.




| type | code |
|---|---|
| square angle | F |
| round angle | Y |

| no. | mm clear size W X h | mm sub clearsize W' X h X r | mm frame size W1 X h1 X r1 | mm frame size W2 X h2 X r2 | cutout in steel wall W3 X h3 X r3 | mm glass external size T | mm glass external size W4 X h4 X r4 | qty | weight Kg t=8 | weight Kg t=6 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 740 X 500 | 355 X 500 X 50 | 825 X 588 X 94 | 890 X 650 X 125 | 840 X 600 X 100 | 6,8 | 373 X 518 X 58 | 20 | 20.0 | 18.9 |
| 2 | 830 X 560 | 400 X 560 X 50 | 918 X 648 X 94 | 980 X 710 X 125 | 930 X 660 X 100 | | 418 X 578 X 58 | 24 | 21.9 | 20.7 |
| 3 | 930 X 630 | 450 X 630 X 100 | 1018 X 718 X 144 | 1080 X 780 X 175 | 1030 X 730 X 150 | | 468 X 648 X 108 | 26 | 24.8 | 23.3 |
| 4 | 1030 X 710 | 500 X 710 X 100 | 1118 X 798 X 144 | 1180 X 860 X 175 | 1130 X 810 X 150 | | 518 X 728 X 108 | 30 | 28.0 | 26.1 |
| 5 | 500 X 630 | 235 X 630 X 50 | 588 X 718 X 94 | 650 X 780 X 125 | 600 X 730 X 100 | | 253 X 648 X 58 | 18 | 18.6 | 17.8 |
| 6 | 600 X 710 | 285 X 710 X 50 | 688 X 798 X 94 | 750 X 860 X 125 | 700 X 810 X 100 | | 303 X 728 X 58 | 22 | 21.5 | 20.4 |
| 7 | 750 X 800 | 360 X 800 X 50 | 838 X 888 X 94 | 900 X 950 X 125 | 850 X 900 X 100 | | 378 X 818 X 58 | 26 | 25.6 | 24.0 |

Identification example:

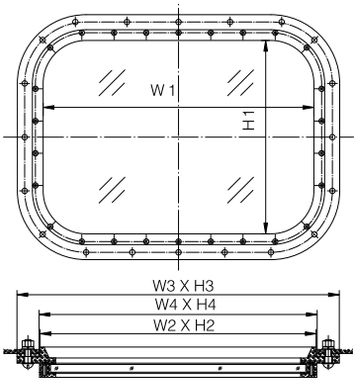
Aluminium sliding window clear size 750X800 left opening（L）:

Aluminium sliding window 750X800–L CB/T 3765–1996

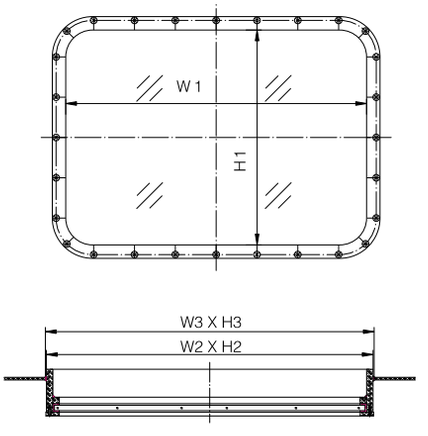
# WHEELHOUSE FIXED RECTANGULAR WINDOW

CB/T3226–1995

Used for wheelhouse,bridge etc.




Type A–bolted fixed(aluminium alloy)




Type B–welding fixed(steel)

| type | frame | description | main frame material |
|---|---|---|---|
| A | BH | heating bolted | aluminium |
| | BN | safety glass, bolted | |
| B | WH | heating welding | steel |
| | WN | safety glass welding | |

| type | mm clear size | mm frame size | | cutout in steel wall | | glass thickness | |
|---|---|---|---|---|---|---|---|
| | W1 X H1 | W2 X H2 | W3 X H3 | W4 X H4 | r | BH | BN |
| A | 800 X 630 | 848 X 678 | 920 X 750 | 852 X 682 | 126 | 12 | 15 |
| | 800 X 710 | 848 X 758 | 920 X 830 | 852 X 762 | | 12 | 15 |
| | 900 X 630 | 948 X 678 | 1020 X 750 | 952 X 682 | | 12 | 17 |
| | 900 X 710 | 948 X 758 | 1020 X 830 | 952 X 762 | | 12 | 17 |
| | 900 X 800 | 948 X 848 | 1020 X 920 | 952 X 852 | | 12 | 17 |
| | 1200 X 630 | 1248 X 678 | 1320 X 750 | 1252 X 682 | | 15 | 20 |
| | 1200 X 710 | 1248 X 758 | 1320 X 830 | 1252 X 762 | | 15 | 20 |
| | 1200 X 800 | 1248 X 848 | 1320 X 920 | 1252 X 852 | | 15 | 20 |
| | 1500 X 710 | 1548 X 758 | 1620 X 830 | 1552 X 762 | | 15 | 20 |
| | 1500 X 800 | 1548 X 848 | 1620 X 920 | 1552 X 852 | | 15 | 20 |
| | 1800 X 710 | 1848 X 758 | 1920 X 830 | 1852 X 762 | | 15 | 20 |
| | 1800 X 800 | 1848 X 848 | 1920 X 920 | 1852 X 852 | | 15 | 20 |
| | 1800 X 900 | 1848 X 948 | 1920 X 1020 | 1852 X 952 | | 15 | 20 |

| type | mm clear size | mm frame size | cutout in steel wall | | glass thickness | |
|---|---|---|---|---|---|---|
| | W1 X H1 | W2 X H2 | W3 X H3 | r | BH | BN |
| B | 800 X 630 | 848 X 678 | 852 X 682 | 126 | 12 | 15 |
| | 800 X 710 | 848 X 758 | 852 X 762 | | 12 | 15 |
| | 900 X 630 | 948 X 678 | 952 X 682 | | 12 | 17 |
| | 900 X 710 | 948 X 758 | 952 X 762 | | 12 | 17 |
| | 900 X 800 | 948 X 848 | 952 X 852 | | 12 | 17 |
| | 1200 X 630 | 1248 X 678 | 1252 X 682 | | 15 | 20 |
| | 1200 X 710 | 1248 X 758 | 1252 X 762 | | 15 | 20 |
| | 1200 X 800 | 1248 X 848 | 1252 X 852 | | 15 | 20 |
| | 1500 X 710 | 1548 X 758 | 1552 X 762 | | 15 | 20 |
| | 1500 X 800 | 1548 X 848 | 1552 X 852 | | 15 | 20 |
| | 1800 X 710 | 1848 X 758 | 1852 X 762 | | 15 | 20 |
| | 1800 X 800 | 1848 X 848 | 1852 X 852 | | 15 | 20 |
| | 1800 X 900 | 1848 X 948 | 1852 X 952 | | 15 | 20 |

Identification example:

Wheelhouse fixed rectangular window, electrical heating, clear size of 1500X800, min. power load of 12W/dm$^2$, AC, 220V, 60Hz, central overheating protection unit:

Wheelhouse fixed rectangular window,W H–1500X800, 12G14,CB/T3226–1995