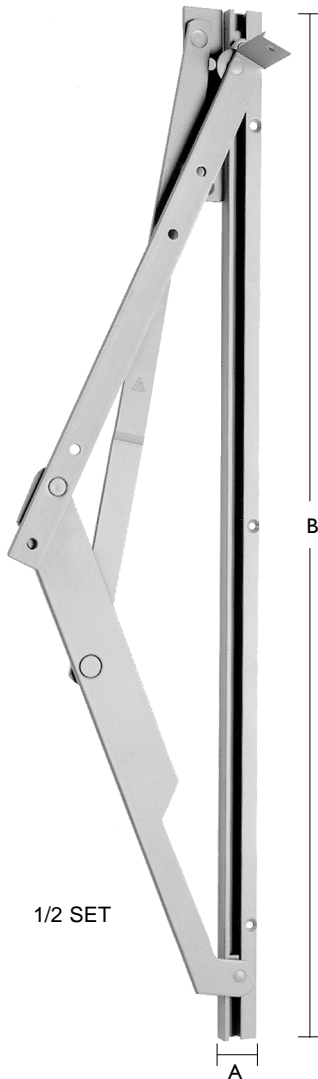
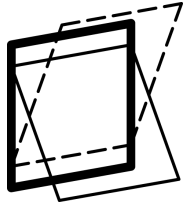




# REVERSIBLE PROJECTING GEARS

## IPA NO.s 21144-52



ORDERING NO.										
IPA NO.	MATERIAL	SURFACE		STANDARD PACKING IN BOXES OF 1 SET	MODULE	A MM	B MM	FRAME DIMENSION OUTSIDE MM	SCREW	APPROX. WEIGHT KG / SET
	STEEL	WITHOUT SPECIFICATION	ELECTROPLATED							
21144	1	0	21	1	6	18	513	588-687	3,5 & 4,0	1,1
21145	1	0	21	1	7	18	613	688-787	3,5 & 4,0	1,3
21146	1	0	21	1	8	18	713	788-887	3,5 & 4,0	1,5
21147	1	0	21	1	9	18	813	888-987	3,5 & 4,0	1,7
21148	1	0	21	1	10	18	913	988-1087	3,5 & 4,0	1,9
21149	1	0	21	1	11	18	1013	1088-1187	3,5 & 4,0	2,1
21150	1	0	21	1	12	18	1113	1188-1287	3,5 & 4,0	2,3
21151	1	0	21	1	13	18	1213	1288-1387	3,5 & 4,0	2,5
21152	1	0	21	1	14	18	1313	1388-1487	3,5 & 4,0	2,7

- CONCEALED FITTINGS
- FULLY REVERSIBLE 170°
- OPENS CLEAR OF CURTAINS AND WINDOW FRAME
- MUSHROOM HEAD ESPAGNOLETTE IPA NO.s 23051-70, ROLLER BOLT ESPAGNOLETTE IPA NO.s 23151-70 AND SIDE BOLT ESPAGNOLETTE IPA NO.s 23701-69 CAN BE USED
- ANODIZED RAILS

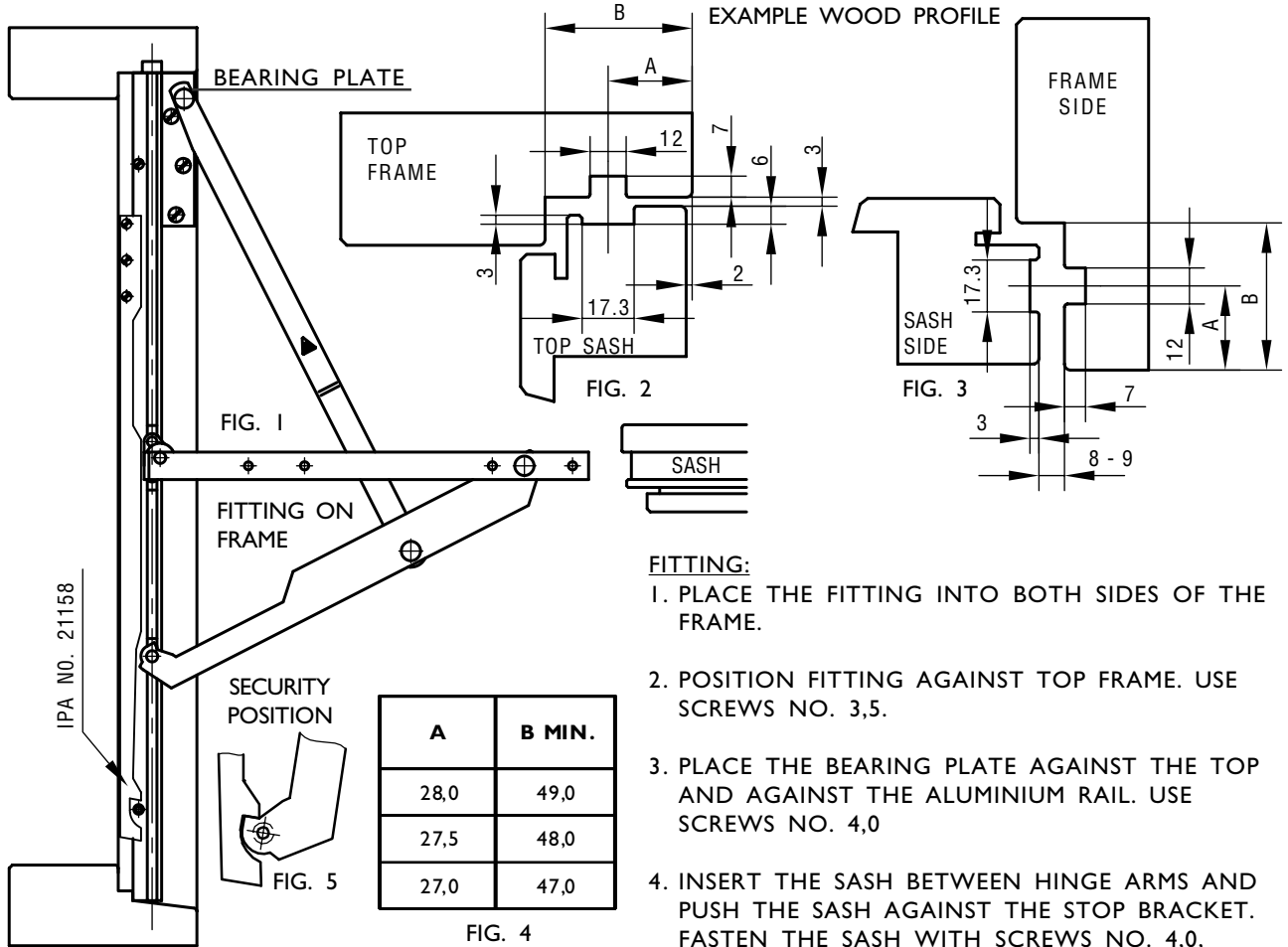
FIRE-ESCAPE OPENING:  
500 MM FROM IPA NO. 21147  
600 MM FROM IPA NO. 21149

RESTRICTORS: SEE SECTION D.



# FITTING INSTRUCTIONS

**IMPORTANT:** FOR THE FITTING OF ANY WINDOW OF A SIZE LARGER THAN M 10 AT LEAST THREE FIXING POINTS (EXPANSION BOLTS) ARE REQUIRED FOR EACH SIDE FRAME. THE SIDE FRAMES MUST BE STRAIGHT TO THE EFFECT THAT THE DISTANCE BETWEEN THE SIDE FRAMES (SLIDING RAILS) IS EXACTLY THE SAME FOR ANY HEIGHT OF THE FRAME. THIS IS IMPERATIVE FOR THE SLIDES TO TRAVEL FREELY IN THEIR ALUMINIUM RAILS.



THE DIMENSIONS INDICATED IN FIGURE 4 MEAN THAT THE WEATHERSTRIP MUST BE MOUNTED ON THE SASH

IPA NO.	MODULE	OUTSIDE SASH MM	LENGTH OF FITTINGS	WEIGHT KG
21144	6	514-613	513	45
21145	7	614-713	613	45
21146	8	714-813	713	45
21147	9	814-913	813	45
21148	10	914-1013	913	45
21149	11	1014-1113	1013	45
21150	12	1114-1213	1113	45
21151	13	1214-1313	1213	45
21152	14	1314-1413	1313	45

**USE THE LARGEST POSSIBLE FITTING**

**MAINTENANCE:**

THE FITTINGS ARE NOT TO BE PAINTED. WHEN FITTING - LUBRICATE THE PIVOT/MOVABLE METAL PARTS OF THE MECHANISM WHILE ACTIVATING REPEATEDLY. HEREAFTER LUBRICATE MINIMUM TWICE A YEAR. DO NOT GREASE THE ALUMINIUM RAILS. TEST THE OPERATION FROM TIME TO TIME. SEE ALSO SECTION H ON THIS SUBJECT.

**FITTING:**

1. PLACE THE FITTING INTO BOTH SIDES OF THE FRAME.
2. POSITION FITTING AGAINST TOP FRAME. USE SCREWS NO. 3,5.
3. PLACE THE BEARING PLATE AGAINST THE TOP AND AGAINST THE ALUMINIUM RAIL. USE SCREWS NO. 4,0
4. INSERT THE SASH BETWEEN HINGE ARMS AND PUSH THE SASH AGAINST THE STOP BRACKET. FASTEN THE SASH WITH SCREWS NO. 4,0, STARTING WITH THE SCREW IN THE STOP BRACKET.
5. FIT THE RESTRICTOR IPA NO. 21158 ON THE LEFT SIDE - SEE FIG. 1.
6. FOR SECURITY REASONS. MAKE SURE THAT THE FIRST NOTCH IS ALWAYS USED IN CLEANING POSITION, SEE FIG. 5

**OPERATION INSTRUCTIONS:**

1. OPEN THE WINDOW - THE RESTRICTOR WILL AUTOMATICALLY RESTRICT THE WINDOW.
2. PULL THE SASH 20 MM - PRESS THE RESTRICTOR IN THE DIRECTION OF THE ARROW AND OPEN THE WINDOW, SEE FIG. 1.
3. WHEN THE WINDOW IS REVERSED FOR CLEANING, THE MECHANISM WILL LOCK AUTOMATICALLY. DISENGAGE AS MENTIONED IN POINT 2.