



# COMITE EUROPEO DE NORMALIZATION

SECURITY GLAZING ANTI BULLET AND ANTI EXPLOSION

CEN EN 1063

class	weapon	caliber	ammunition type	bullet weight		striking velocity		# of impacts	strike spacing		test range		Tickness BRG
				grams	grains	m/s	ft/sec		mm	in	meters	feet	
BR 1	rifle	,22 LR	L/RN	2,6	40,1	350/370	1148/1214	3 x 3	110/130	4,33/5,12	10	32,8	13
BR 2	hand gun	9mm luger	FJ1/RN/SC	8	123,4	390/410	1280/1345	3 x 3	110/130	4,33/5,13	5	16,4	14
BR 3	hand gun	,357magnum	FJ1/CB/SC	10,2	157,4	420/440	1378/1444	3 x 3	110/130	4,33/5,14	5	16,4	16
BR 4	hand gun	,44 rem. Mag.	FJ2/FN/SC	15,6	240,7	430/450	1411/1476	3 x 3	110/130	4,33/5,15	5	16,4	22
BR 5	rifle	5,56 x 45*	FJ2/PB/SC	4	61,7	940/960	3083/3150	3 x 3	110/130	4,33/5,16	10	32,8	32
BR 6	rifle	7,62 x 51**	FJ1/PB/SC	9,5	146,6	820/840	2690/2756	3 x 3	110/130	4,33/5,17	10	32,8	40
BR 7	rifle	7,62 x 51	FJ2/PB/HC1	9,8	151,2	810/830	2657/2723	3 x 3	110/130	4,33/5,18	10	32,8	72
SG 1	shotgun	cal 12	brenneke SLS	31	478,4	400/440	1312/1444	1 x3			10	32,8	32
SG 2	shotgun	cal 12	brenneke SLS	31	478,4	400/440	1312/1444	3 x 3	115/135	4,33/5,20	10	32,8	64
<b>testing</b>	actual gun or equiv barrel	samples storage 12 hrs. @ 13 to 23 C 55,4 to 73,4 F	sample size 495/5005 mm 19,5/19,9 in	witness al foil ,02 mm ,008 in 54g/m3	dist 500 mm 19,7 in	velocity accuracy 1 m/s 3,3 ft/ s	measure 2,5 m (8,2 ft)to target	1or 3 hits 3 samples	equilateral triangle		barrel to target		
	1)full steel jacket plated 2)full steel jacket												
	L	lead					*twist lenght	178 mm					
	CB	coned bullet					**twist lenght	254 mm					
	FJ	full metal jacket bullet											
	FN	flat nose											
	HC1	steel hard core mass 3,7 +/- 0,1 g HCR 63+											
	PB	pointed bullet											
	RN	round nose											
	SC	soft core (lead)											
	SCP1	soft core (lead) & steel penetrato SS 109											

compatibility with APGBT standards

- 1) primary ammunition types
- 2) same number of test samples for qualification
- 3) number of hits and hit spacing
- 4) test conditions/set up similar
- 5) compatible velocities

advanteqes of APGBT standars

- 1) APGBT includes 4 common types of sovietic ammunition (soviet weapons/ammunitions are comunly used in terrorist activities and random street crime)
- 2) APGBT stipulations multiple ammunitions for select levels (example: FAV standard, AP)  
[this stipulation puts a higher bunder on APGBT]  
[creates a higher level of safety for our costumers]  
[you **can not** assume 1 bullet is more lethal than another]
- 3) APGBT includes SS 109 and M 193 protection
- 4) APGBT specifies number of test samples for qualification (3)  
(they do not call out the number of test samples for qual)

