

Design Calculations for FirePro Aerosol Fire Suppression System

FirePro. <small>Reinventing Fire Suppression</small>		GENERAL APPLICATION				Date 6/03/2020		<small>Rev 20.1</small>						
CERTIFICATION	GENERAL APPLICATION					Model	L2 (mm)	L3 (mm)	Stream Length (mm)	Effective Agent Qty	Concentration Primary	Concentration Secondary	Primary Quantity	Secondary Quantity
CLIENT NAME	Cargotec					FP-0020	0	100	300	20	-	-	-	-
Risk Description	CASC E-House					FP-0040	0	100	1200	40	-	-	-	-
Constructed from	Steel					FP-0080	0	100	2000	80	-	-	-	-
Classes of Fire	<input checked="" type="checkbox"/> Class A <input checked="" type="checkbox"/> Class B <input checked="" type="checkbox"/> Class E <input type="checkbox"/> Class D <input type="checkbox"/> Class F					FP-0100	0	100	1000	100	-	-	-	-
STREAM (m)	<input type="text"/>					FP-0200	100	300	1500	200	-	-	-	-
GROSS DIMENSIONS (All in Meters)	Length	Width	Height	Enter VOLUME =	Vol Entered	FP-0500	200	500	2500	500	-	-	-	-
	<input type="text"/>	<input type="text"/>	<input type="text"/>			107.30 m ³	FP-1200	200	1200	3500	1,200	-	-	-
Actual Leakage Measurement - m ² =						FP-2000	200	1200	3500	2,000	-	-	-	-
Leakage Allowance without additional Agent =						FP-3000	700	1700	4000	3,000	12,000	-	-	4
GROSS Volume used for Calculation =						FP-5700	800	1800	8000	5,700	-	-	-	-
PRIMARY AGENT DISCHARGE						Total Concentration		12,000		-				
Secondary Agent Discharge						Required Concentration		11,717		-				
						% Required Concentration		102%						
						<input checked="" type="checkbox"/> Design Calculation has been Confirmed								
						<input checked="" type="checkbox"/> FirePro Units have suitable STREAM length for Risk Area Coverage								
						<input type="checkbox"/> Leakage compensation made in Primary Discharge								
						<input type="checkbox"/> Additional HOLD time Required for the risk								
Aust.Std Design Notes					APPROVED									
CALCULATION OF VOLUME : Calculation is based on Gross Volume with NO deductions for any Objects that occupy volume within the protected space. This category covers fixed condensed aerosol extinguishing system units intended for total flooding applications. AS 4487 and AS5062.					Prepared By:		Company							
Minimum Extinguishing Factors (mef) 84 X 1.3 = 109					PM		FSE							
<ul style="list-style-type: none"> L2 is the thermal clearance required where the temperature of the discharge is less than 200° C L3 is the thermal clearance required where the temperature of the discharge is less than 75° C 														

FirePro. <small>Reinventing Fire Suppression</small>		GENERAL APPLICATION				Date 27/03/2020		<small>Rev 20.1</small>						
CERTIFICATION	GENERAL APPLICATION					Model	L2 (mm)	L3 (mm)	Stream Length (mm)	Effective Agent Qty	Concentration Primary	Concentration Secondary	Primary Quantity	Secondary Quantity
CLIENT NAME	Cargotec					FP-0020	0	100	300	20	-	-	-	-
Risk Description	CASC E-House Transformer Room					FP-0040	0	100	1200	40	-	-	-	-
Constructed from	Steel					FP-0080	0	100	2000	80	-	-	-	-
Classes of Fire	<input checked="" type="checkbox"/> Class A <input checked="" type="checkbox"/> Class B <input checked="" type="checkbox"/> Class E <input type="checkbox"/> Class D <input type="checkbox"/> Class F					FP-0100	0	100	1000	100	-	-	-	-
STREAM (m)	<input type="text"/>					FP-0200	100	300	1500	200	-	-	-	-
GROSS DIMENSIONS (All in Meters)	Length	Width	Height	Enter VOLUME =	Not Used	FP-0500	200	500	2500	500	-	-	-	-
	1.82	1.50	3.35			9.15 m ³	FP-1200	200	1200	3500	1,200	-	-	-
Actual Leakage Measurement - m ² =						FP-2000	200	1200	3500	2,000	2,000	-	1	
Leakage Allowance without additional Agent =						FP-3000	700	1700	4000	3,000	-	-	-	-
GROSS Volume used for Calculation =						FP-5700	800	1800	8000	5,700	-	-	-	-
PRIMARY AGENT DISCHARGE						Total Concentration		2,000		-				
Secondary Agent Discharge						Required Concentration		999		-				
						% Required Concentration		200%						
						<input checked="" type="checkbox"/> Design Calculation has been Confirmed								
						<input checked="" type="checkbox"/> FirePro Units have suitable STREAM length for Risk Area Coverage								
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