

**Reconstruction and modernisation of I.P.  
"Emil Nicula" Theoretical High School, land  
no. cad. 1034320.065, with the addition of  
auxiliary buildings, located in Mereni village,  
104 Stefan cel Mare si Sfint Street. Form No. 7**

(name of the project)

Form No. 7  
WinCmeta

**LOCAL ESTIMATE № 2-3-6  
Fire alarm system. Block D (2506-SI)**

**Estimate value lei**

Prepared in current prices: 20.10.2025

№ No	Symbol standards and Code resources	Works and expenses	U.M.	Quantity according to project data	Estimated value, lei	
					Per unit of measurement incl. salary	Total incl. salary
1	2	3	4	5	6	7
		1. Construction works 1.1. Cabling and accessories				
1	RpCU06A1	Execution of trenches up to 5 cm deep in 5 x 50 cm <sup>2</sup> brick walls for mechanised execution	m	40.00		
2	RpCU07D	Filling trenches in walls up to 50 cm <sup>2</sup> , after installation or reinforcement.	m	40.00		
3	RCsB29B	Drilling through holes in brick and stone masonry using a diamond core drill with a diameter of: 30 mm	pc	70.00		
4	RpCU07A	Filling holes in walls with plaster mortar after installation or reinforcement work.	pc	70.00		
		<i>Total</i>	lei			
		<b>Total Cabling and accessories Including salary</b>				
		<i>Total</i>	lei			
		<i>Social security</i>	24%			
		<i>Transport expenses</i>	%			
		<i>Supply and storage expenses</i>	%			
		<i>Total</i>				
		<i>Overhead expenses</i>	%			
		<i>Total</i>				
		<i>Estimated profit</i>	%			
		<b>Total Construction works Including salary</b>				
		2. Installation works 2.1. Cabling and accessories				
5	08-02-409- 1	Vinyl plastic pipe on installed structures, on walls and columns,	100 m	7.00		

1	2	3	4	5	6	7
		fastened with clamps, diameter up to 25 mm				
6	supplier price	Corrugated PVC pipe with probe, crush resistance 750N, d=20 mm	m.l.	700.00		
7	08-02-390-1	Plastic ducts with cover, section 25x16 mm, including all necessary accessories (elbows, plugs, tees, crosses, etc.)	100	1.00		
8	08-02-152-3	Metal cable structures: welded construction	t	0.01		
9	08-02-412-2	Insertion of conductors into metal pipes and hoses: first single-core or multi-core conductor in common braiding, cross-section up to 6 mm <sup>2</sup>	100m	11.00		
10	supplier price	Alarm cable, with copper conductors with a cross-section of 2x0.8 mm <sup>2</sup> , according to STAS 31565-2012, with a fire resistance limit of at least 30 minutes, type JE-H(St)H FE180 / E30 1x2x0.8 mm <sup>2</sup>	m.l.	100.00		
11	supplier price	Alarm cable, with copper conductors with a cross-section of 2x1.0 mm <sup>2</sup> , in accordance with STAS 31565-2012, with a fire resistance limit of at least 30 minutes, type JE-H(St)H FE180 / E30 1x2x1.0 mm <sup>2</sup>	m.l.	100.00		
12	supplier price	Alarm cable, with copper conductors with a cross-section of 2x1.0 mm <sup>2</sup> , in accordance with STAS 31565-2012, with a fire resistance limit of at least 30 minutes, type JE-H(St)H FE180 / E30 1x2x1.5 mm <sup>2</sup>	m.l.	750.00		
13	supplier price	Shielded cable, with solid copper conductors, type FTP cat. 5e 4x2x24AWG (0.50 mm <sup>2</sup> ), halogen-free, FE180 / E30 according to STAS 31565-2012	m.l.	150.00		
		<i>Total</i>	lei			
		<b>Total Cabling and accessories Including salary</b>				
		2.2. Fire alarm				
14	10-08-003-03	Devices - power supply and control unit	pc	1.00		
15	08-03-575-1	Device - Encapsulated battery 12 V, 17 Ah	pc	2.00		
16	08-03-572-3	Control unit cabinet or distribution point (cabinet), wall-mounted, height and width, mm, up to 600x600, IP31	pc	1.00		
17	10-08-001-03	Receiving devices: "SI" receiving and control devices, start-up devices - Addressable module with one input	10	0.20		

1	2	3	4	5	6	7
		and one supervised output and Enea protocol relay				
18	10-08-001-03	Receiving devices: "SI" reception and control devices, start-up devices - Addressable module with 4 inputs / 4 supervised outputs, Enea protocol	10	0.10		
19	10-08-002-02	Addressable optical smoke detector with socket and mounting base socket	pc	58.00		
20	10-08-002-03	Addressable combined smoke and temperature detector with socket and mounting base socket	pc	7.00		
21	08-03-591-1	Addressable manual fire alarm button	100 pcs	0.08		
22	08-03-593-10	Addressable fire siren with flash	100 pcs	0.01		
		<i>Total</i>	lei			
		<b>Total Fire alarm Including salary</b>				
		2.3. Smoke extraction system (opening of smoke vents)				
23	08-03-532-4	Control panel with buttons, common destination, mounted on wall or column, quantity of panel elements up to 3	pc	1.00		
24	08-03-572-3	Cabinet-type control block or distribution point (cabinet), wall-mounted, height and width, mm, up to 600x600, IP31	pc	1.00		
25	10-08-003-03	Devices - power supply and control block	pc	1.00		
26	08-03-575-1	Device - Encapsulated battery 12 V, 9 Ah	pc	2.00		
27	08-01-080-3	Measuring and protection device, number of connected terminals up to: 12 - Relay	pc	2.00		
28	08-03-575-1	Device - automatic switches, load breakers	pc	6.00		
29	08-03-572-3	Cabinet-type control unit or distribution point (cabinet), wall-mounted, height and width, mm, up to 600x600, IP31	pc	1.00		
		<i>Total</i>	lei			
		<b>Total Smoke extraction system (opening of smoke vents) Including salary</b>				
		2.4. Two-way communication system between firefighters and dispatch centre				
30	10-04-066-06 applied	Wall-mounted equipment: Communication unit with two-way	pcs	3.00		

1	2	3	4	5	6	7
		audio connection to central dispatch unit				
		<i>Total</i>	lei			
		<b>Total Two-way communication system between firefighters and dispatch centre Including salary</b>				
		<i>Total</i>	lei			
		<i>Social insurance</i>	24%			
		<i>Transport expenses</i>	%			
		<i>Supply and storage expenses</i>	%			
		<i>Total</i>				
		<i>Overhead expenses</i>	%			
		<i>Total</i>				
		<i>Estimated profit</i>	%			
		<b>Total Installation work Including salary</b>				
		3. Equipment				
		3.1. Fire alarm				
31	Supplier price	Metal shield for installing fire detection control panel with additional panels and filler panels, from manufacturer, IP31 dimensions 433 x 563 x 187 mm in set with fasteners and accessories	pc	1.00		
	supplier price	24 V, 4A backup power supply with space for 2 encapsulated 12V, 17 Ah batteries.	pc	1.00		
33	supplier price	Sealed battery 12 V, 17 Ah	pc	2.00		
34	supplier price	Addressable module with one input and one supervised output and Enea protocol relay type EM312SR or similar according to characteristics	pc	20.0		
35	supplier price	Addressable module with 4 inputs / 4 supervised outputs, Enea protocol type EM344S or similar according to characteristics	pc	1.00		
36	supplier price	Addressable optical smoke detector, Enea protocol, with insulator included, type ED100 or similar according to characteristics.	pc	58.00		
37	supplier price	Addressable smoke and temperature detector with Enea protocol and insulator included, type ED300 or similar according to characteristics.	pc	7.00		
38	supplier price	Socket for EB0010 detectors or similar according to characteristics	pc	65.00		
39	supplier price	Mounting base for EB0030 detector sockets or similar according to specifications	pc	65.00		

1	2	3	4	5	6	7
40	supplier price	Addressable manual fire alarm button, Enea protocol, type EC0020 or similar according to characteristics	pc	8.00		
41	supplier price	Addressable fire siren with flash, Enea protocol, type ES2020RE or similar according to characteristics.	pc	1.00		
		<i>Total</i>	lei			
		<b>Total Fire alarm Including salary</b>				
		3.2. Smoke extraction system (opening of smoke vents)				
42	Supplier price	Button for opening and closing dampers in manual mode, without fixing, connection to ECF-10-G type I/O modules or similar according to characteristics	pc	2.00		
43	supplier price	Body for installing 2 NSE-CS2-GR type buttons or similar according to characteristics	pc	1.00		
44	supplier price	Metal shield for installing fire detection control panel with additional panels and filler panels, from manufacturer, IP31 dimensions 433 x 563 x 187 mm in set with fasteners and accessories	pc	1.00		
45	supplier price	24 V, 4A backup power supply with space for 2 encapsulated 12V, 17 Ah batteries.	pc	1.00		
46	supplier price	12 V, 9 Ah sealed battery	pc	2.00		
47	supplier price	4-contact relay 12/230 V type ERM2-230AC or similar according to specifications	pc	2.00		
48	supplier price	2P load separator, 20A, 230 V	pc	2.00		
49	supplier price	Automatic switch 2P, 6A, 230 V	pc	4.00		
50	supplier price	IP31 metal box, dimensions 300x300x100 mm equipped with DIN, N, and PE bars and screw terminals with a cross-section of 2.5 mm <sup>2</sup> (10 pcs)	pc	1.00		
		<i>Total</i>	lei			
		<b>Total Smoke extraction system (opening of smoke vents) Including salary</b>				
		3.3. Two-way communication system between firefighters and dispatch centre				
51	Supplier price	Communication unit with the following features: 2 DSS keys	pcs	3.00		

1	2	3	4	5	6	7
		<p>(speed dial), RJ45 Ethernet jack x2: Network x1 (802.3AF POE enabled), LAN x1, PoE: 802.3af (Class 0 - 12.95W) 48V/380mA, main chipset: Broadcom, passive switch: normally open and normally closed, maximum 30V/1A AC/DC, with 2-wire circuit input, 2 outputs, one external output connector for active speaker, audio output, available for DVR recording, audio amplifier: 2.5 W, power supply: 12V+-15%/1A DC or PoE, housing material: aluminium alloy, cast aluminium, protection rating: IP65, IK10, operating temperature: - 40...+70°C. Works with most SIP platforms: Asterisk, Broadsoft, Elastix.</p> <p>Sound: Narrowband codecs: G.711a/u, G.723.1, G.726-32K, G.729AB, wideband codecs: G.722, full-duplex echo cancellation (AEC) hands-free mode, 96 ms queue length, voice activity detection (VAD) / comfort noise generation (CNG) / noise analyser (BNE) / noise reduction (NR), packet loss concealment (PLC), adaptive dynamic fluctuation buffer up to 300 ms, DTMF: In-band, Out-of-Band DTMF-Relay (RFC2833) / SIP INFORMATION, general coverage: coverage distance 5 m.</p> <p>Network: RJ45 Ethernet jack x2: Network x1 (802.3AF POE enabled), LAN x1 (Bridged to Network), IP configuration: Static / DHCP / PPPoE, network access control: 802.1x, VPN: L2TP (Basic Unencrypted) / OpenVPN, VLAN, QoS.</p> <p>Protocols: SIP2.0 via UDP/TCP/TLS, RTP/RTCP/SRTP, STUN, DHCP, PPPoE, 802.1x, L2TP (basic unencrypted), OpenVPN, SNTP, FTP/TFTP, HTTP/HTTPS, TR069.</p>				
52	Supplier price	Client license	pcs	3.00		
		<i>Total</i>	lei			
		<b>Total Two-way communication system between firefighters and dispatch centre Including salary</b>				

1	2	3	4	5	6	7
		Total	lei			
		Supply and storage expenses	%			
		Total Equipment Including salary				
		4. Adjustment and start-up work				
53	1-10-001-1	Collection and processing of information signals from protection devices, automatic electrical and technological control systems	signal	90.00		
		Total	lei			
		Social insurance	24%			
		Total				
		Overhead costs	%			
		Total				
		Estimated profit	%			
		Total Adjustment and start-up works Including salary				
		Total	lei			
		Total estimate: Including salary				