

Trade house ADEM

Location: Almaty, Kazakhstan



Building characteristics

Purpose:

One of the largest supermarkets in Almaty city. Trading center including a lot of boutiques, cafés, restaurants, entertaining complexes, etc

Area: 90 000 m²

Cubic measure being handled by VTS units:

348 000 m³

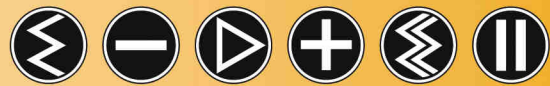
The conception of ventilation system

The ventilation system has been designed to provide the best and comfortable microclimate conditions on trading spaces and boutiques.

Taking into account specificity of premises (trading places, cafe, restaurants, lavatories) in which air supplies, AHU's and systems of air lines have been picked up taking into account all necessary and demanded parameters for noise characteristics, a filtration with various degree of filtration, speeds of giving of air in premises.

Air exchange rate, and also necessary temperature characteristics of supplying fresh air for maintenance of all sanitary-and-epidemiologic norms and rules, and also creations of a favorable microclimate in shopping centre for visitors have been considered according to the norm and task of the customer. Tap of exhaust air of shopping centre is carried out by roof and channel fans.

Project AHUs functions



General characteristic of devices		
Number of AHUs	19	
Configuration	Bag Filter, Cooler, Heater, Fan, Filter, Silencer	
Operational parameters		
Total AHUs cooling capacity [kW]	1 758	
Total AHUs heating capacity [kW]	4 559	
Total supply AHUs electric power consumption [kW]	207	
Total exhaust AHUs electric power consumption [kW]	0	
Total supply Air Flow Rate [m ³ /h]	348 000	
Total exhaust Air Flow Rate [m ³ /h]	0	
Average SFP [kW/m ³ /s]/[W/m ³ /h]	2,08	0,58
Noise parameters for loudest units at 250Hz		
	Supply	Exhaust
Inlet [dB]	85	0
Outlet [dB]	89	0
Environment [dB]	75,6	0

Solution provided by VTS

The cooperation between VTS and the investor's representatives resulted in a delivery of 19 supply AHU's with cooling and heating possibility ensuring outside air treatment. Following feature of VTS unit convince the customer to select Ventus units from other strong competitors: casing construction, unit leakage rate, compact unit size, service availability.

