

FACILITY CLASS 1, OPERATION AND TRAINING

Category Group 11 Airfield Pavements

Overview.

1.1. **General Description.** The Airfield is the portion of the base used for airfield operations, i.e., take offs, landings, servicing, parking, etc. The designation of airfield pavements applies to runways, taxiways, aprons, pads, paved shoulders, and paved overruns; it is a paved surface designed for the landing and take-off of fixed-wing aircraft that can also accommodate rotary-wing aircraft. The surface is usually concrete or asphalt. Runway lighting is not included here, but is captured under **Category Group 13**, Communications, Navigation Aids and Airfield Lighting. Additional information is provided in AFI 32-1042, *Standards for Marking Airfields*, for standards for marking airfield pavements and obstructions; AFI 32-1044, *Visual Air Navigation Systems* for lighted signs required for runways, taxiways, and aprons; and ETL 04-2, *Standard Airfield Pavement Marking Schemes* on dimensions, colors, and layout details for standard airfield pavement marking schemes.

1.2. **Environmental Considerations.** When planning airfield pavements, consider storm water runoff and control of pollutants being discharged into storm water to maintain compliance with the storm water and discharge permit requirements, including deicing operations. Comply with requirements under 33 USC § 1251 - 1387, *Clean Water Act* (CWA), AFI 32-7041, *Water Quality Compliance*, and federal, state, and local storm water permit requirements.

1.3. **Explosives Safety Considerations.** When planning aircraft support facilities where personnel or explosives are involved, ensure explosives safety standards (DoD 6055.9-Std, *DoD Ammunition and Explosives Safety Standards* and AFMAN 91-201, *Explosives Safety Standards*) are considered. These standards are designed to protect facilities and personnel from the damaging effects of explosions involving munitions and explosives.

1.4. **Pavement Thickness Requirements.** Pavement design criteria and standards are discussed in detail in UFC 3-260-02, *Pavement Design for Airfields*. Airfield pavements have six design types based on mission and aircraft load criteria defined as light, medium, heavy, modified heavy, auxiliary, and assault landing zone. Airfield pavements are further grouped into four traffic areas based on operational use defined as Types A, B, C, and D. Refer to Chapter 3 and Figures 3-1, 3-2, and 3-3 of UFC 3-260-02 for further discussion of airfield pavements and traffic areas. Additional design criteria are contained in UFC 3-260-01, *Airfield and Heliport Planning and Design* and ETL 09- 1, *Airfield Planning and Design Criteria for Unmanned Aircraft Systems (UAS)*, for dimensions, geometry, and pavement design.