

Runway Operations

Approach/Departure Code

Office of Airports

Airport Engineering, AAS-100

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Federal Aviation
Administration



What are Approach/Departure Codes?

These codes reflect the proper aircraft design groups' utilization for existing runway to taxiway separations. Reference to these codes allows users to quickly assess a runway's suitability related to critical geometry and visibility without special operations

- **Three parameters:**
 - Airplane Approach Code (AAC)
 - Airplane Design Group (ADG)
 - Runway Visibility Range (RVR)
- **Standard Runway Taxiway Separations per Airport Design, AC 5300-13A.**
- **Users can operate on airport infrastructure without any operational mitigation.**
- **B-II-VIS, C-IV-2400, D-V- 4000, ...**



Approach Reference Code



Visibility Minimums	Runway to Taxiway Separation (ft)									
	≥150	≥200	≥225	≥240	≥250	≥300	≥350	≥400	≥500	≥550
Visual	B/I(S)/VIS	B/I(S)/VIS	B/I/VIS	B/II/VIS	B/II/VIS	B/III/VIS D/II/VIS	B/III/VIS	D/IV/VIS D/V/VIS	D/VI/VIS	D/VI/VIS
Not lower than 1 mile	B/I(S)/5000	B/I(S)/5000	B/I/5000	B/II/5000	B/II/5000	B/III/5000 D/II/5000	B/III/5000	D/IV/5000 D/V/5000	D/VI/5000	D/VI/5000
Not lower than 3/4 mile	B/I(S)/4000	B/I(S)/4000	B/I/4000	B/II/4000	B/II/4000	B/III/4000 D/II/4000	B/III/4000	D/IV/4000 D/V/4000	D/VI/4000	D/VI/4000
Lower than 3/4 mile but not lower than 1/2 mile		B/I(S)/2400	B/I/4000 B/I(S)/2400	B/II/4000	B/II/2400	B/III/4000 ¹ D/II/4000 B/II/2400	B/III/2400	D/IV/2400 D/V/2400	D/VI/2400	D/VI/2400
Lower than 1/2 mile								D/V/2400 D/IV/1600	D/VI/2400 D/V/1600	D/VI/1600



Notes: (S) denotes small aircraft

Entries for Approach Category D also apply to Approach Category E. However, there are no Approach Category E aircraft currently in the civil fleet.

For ADG-VI aircraft with tail heights of less than 66 feet (20 m), ADG-V separation standards may be used.

1. How to use this table:

Each APRC entry denotes a combination of Aircraft Approach Category, Airplane Design Group, and visibility condition under which landing operations may be conducted without operational mitigations. Within an APRC, operations may be conducted by airplanes up to the AAC and ADG, and down to the visibility conditions noted. In this example, with visibility minimums of lower than 3/4 mile but not lower than 1/2 mile, the applicable APRCs are B/III/4000, D/II/4000, and B/II/2400. This means that following aircraft may land:

- Within Approach Categories A & B, Airplane Design Groups I(S), I, II, & III, down to 3/4 mile visibility.
- Within Approach Categories C & D, Airplane Design Groups I & II, down to 3/4 mile visibility.
- Within Approach Categories A & B, Airplane Design Groups I(S), I & II, down to 1/2 mile visibility.



Departure Reference Code

Runway to Taxiway Separation (ft)					
≥ 150	≥ 225	≥ 240	≥ 300	≥ 400	≥ 500
B/I(S)	B/I	B/II	B/III D/II	D/IV D/V ¹	D/VI ²

Notes: (S) denotes small aircraft

Entries for Approach Category D also apply to Approach Category E. However, there are no Approach Category E aircraft currently in the civil fleet.

- Example: With a runway to taxiway separation of 300 feet, the following airplanes may depart:
 - Within Approach Categories A & B, Airplane Design Groups I(S), I, II, & III.
 - Within Approach Categories C & D, Airplane Design Groups I & II.
 - Thus, an airplane of Approach Category C, Airplane Design Group III requires a runway to taxiway separation of 400 feet for departure.
- For unrestricted operations by ADG-VI airplanes, a runway to taxiway separation of 500 feet is required. However, ADG-VI airplanes may depart with aircraft on the parallel taxiway where the runway to taxiway separation is as little as 400 feet as long as no ADG-VI aircraft occupy the parallel taxiway beyond 1500 feet of the point of the start of takeoff roll.
When there is snow, ice or slush contamination on the runway, ADG-VI airplanes may depart with aircraft on the parallel taxiway where the runway to taxiway separation is as little as 400 feet as long as no aircraft occupy the parallel taxiway beyond 1500 feet of the point of the start of takeoff roll.



Recommendation

The AFD should clearly reference approach and departure codes applicable to the airport's movement areas where special operations are not needed. This information could be included as a separate section and listed by runway, similar to Runway Declared Distance Information. For example, at Indianapolis Intl (IND):

- **RWY05L APRC D/VI/2400, DPRC D/VI, RWY05R APRC B/III/2400, DPRC B/III, D/II, RWY14 APRC D/V/2400, D/IV/1600, DPRC D/IV, D/V, RWY23L APRC B/III/2400, DPRC B/III, D/II, RWY23R APRC D/VI/2400, D/IV/1600, DPRC D/VI**



Thank You!

Questions?

