

Table 3-5. Runway design standards matrix

*Aircraft Approach Category (AAC) and
Airplane Design Group (ADG):
(select from pull-down menu at right)*

ITEM	DIM ¹	Visibility Minimums			
		Visual	Not Lower than 1 mile	Not Lower than 3/4 mile	Lower than 3/4 mile
Runway Design					
Runway Length	A	Refer to paragraphs 302 and 304			
Runway Width	B				
Shoulder Width					
Blast Pad Width					
Blast Pad Length					
Crosswind Component					
Runway Protection					
Runway Safety Area (RSA)					
Length beyond departure end	R				
Length prior to threshold	P				
Width	C				
Runway Object Free Area (ROFA)					
Length beyond runway end	R				
Length prior to threshold	P				
Width	Q				
Runway Obstacle Free Zone (ROFZ)					
Length		Refer to paragraph 308			
Width		Refer to paragraph 308			
Precision Obstacle Free Zone (POFZ)					
Length					
Width					
Approach Runway Protection Zone (RPZ)					
Length	L				
Inner Width	U				
Outer Width	V				
Acres					
Departure Runway Protection Zone (RPZ)					
Length	L				
Inner Width	U				
Outer Width	V				
Acres					
Runway Separation					
<i>Runway centerline to:</i>					
Parallel runway centerline	H	Refer to paragraph 316			
Holding position					
Parallel Taxiway/Taxilane centerline	D				
Aircraft parking area	G				
Helicopter touchdown pad		Refer to AC 150/5390-2			

Notes:

- Appendix 7 contains non-interactive tables for all RDCs.
- Values in the table are rounded to the nearest foot. 1 foot = 0.305 meters.

Footnotes:

1. Letters correspond to the dimensions in Figure 3-26.
2. The runway to taxiway/taxilane centerline separation standards are for sea level. At higher elevations, an increase to these separation distances may be required to keep taxiing and holding aircraft clear of the inner-transitional OFZ (refer to paragraph 308.c). Using this standard to justify a decrease in runway to taxiway/taxilane separation is not permitted.
3. The standard runway centerline to parallel taxiway centerline separation distance is 400 feet for airports at or below an elevation of 1,345 feet; 450 feet for airports between elevations of 1,345 feet and 6,560 feet; and 500 feet for airports above an elevation of 6,560 feet.
4. For approaches with visibility less than ½-statute mile, runway centerline to taxiway/taxilane centerline separation increases to 400 feet.
5. For approaches with visibility less than ½-statute mile, the separation distance increases to 500 feet.
6. For approaches with visibility less than ¾ statute mile, the separation distance may increase by an elevation adjustment. For approaches with visibility less than ½-statute mile, the separation distance increases to 550 feet.
7. This distance is increased 1 foot for each 100 feet above 5,100 feet above sea level.
8. This distance is increased 1 foot for each 100 feet above sea level.
9. The RSA length beyond the runway end begins at the runway end when a stopway is not provided. When a stopway is provided, the length begins at the stopway end.
10. The RSA length beyond the runway end may be reduced to that required to install an Engineered Materials Arresting System (EMAS) (the designed set-back of the EMAS included) designed to stop the design aircraft exiting the runway end at 70 knots.
11. This value only applies if that runway end is equipped with electronic or visual vertical guidance. If visual guidance is not provided, use the value for “length beyond departure end.”
12. For airplanes with maximum certificated takeoff weight of 150,000 lbs or less, the standard runway width is 100 feet, the shoulder width is 20 feet, and the runway blast pad width is 140 feet.
13. An RSA width of 400 feet is permissible.

Table 3-6. Runway to taxiway separation for reverse turns from a high-speed exit based on Taxiway Design Group (TDG)

	TDG						
	1	2	3	4	5	6	7
Runway centerline to taxiway/ taxilane centerline – minimum	250 ft (76 m)	265 ft (81 m)	350 ft (107 m)	427 ft (130 m)	427 ft (130 m)	484 ft (148 m)	484 ft (148 m)
Runway centerline to taxiway/ taxilane centerline - recommended	250 ft (76 m)	300 ft (91 m)	350 ft (107 m)	450 ft (137 m)	450 ft (137 m)	600 ft (183 m)	600 ft (183 m)