

9.2 Takeoff Performance

V-Speeds Explained

Before every departure, three critical speeds must be calculated and inserted into the MCDU:

V1 – Decision Speed

- The maximum speed at which a rejected takeoff can be safely initiated
 - After passing V1, the takeoff **must be continued**, even in case of failure
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VR – Rotation Speed

- The speed at which the pilot initiates aircraft rotation
 - Smooth and controlled pitch input is required
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V2 – Takeoff Safety Speed

- Minimum safe climb speed after liftoff
 - Ensures sufficient climb performance in case of engine failure
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Operational Importance

Incorrect V-speeds can lead to:

- Unsafe takeoff performance
 - Runway overruns
 - Insufficient climb capability
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Core Rule

“Takeoff performance is calculated - never estimated.”

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