



## Minimums policy

$$DH_{CAT I} = \max \{200 \text{ ft} ; OCH\} \rightarrow DA \quad (\text{regulations})$$

$$DH_{CAT II} = \max \{100 \text{ ft} ; OCH\} \leq 200 \text{ ft} \quad (\text{regulations})$$

All aircraft

ACFT	Cat II
<b>ALL</b>	As published. Comply with <b>100 ≤ DH ≤ 200 ft</b> <b>RVR ≥ 300 m</b>
Operat. procedure : follow manufacturer guidance	

B737

FAIL-PASSIVE LANDING				
ACFT	Cat IIIA		Cat IIIB	
<b>B737 FAIL-PASSIVE LDG</b>	<b>DH 50 (RA)</b> <b>RVR 200 m</b>	One engine operative Not authorised* <i>Revert to CAT II</i>	Not authorised	
<b>PFD</b>	<i>LAND 2 in Fail-OP Acft</i> <i>CMD in Fail-PA Acft</i>			

\*except for HUD-equipped ACFT and qualified crew : hand-flown approach only, DH 50, RVR 200m

FAIL-OPERATIONAL LANDING				
ACFT	Cat IIIA		Cat IIIB	
<b>B737 FAIL-OPERAT. LDG</b>	<b>DH 25 (RA)</b> <b>RVR 200 m</b>	One engine operative <i>Flaps 30</i> <b>DH 50 (RA)</b> <b>RVR 200 m</b>	<b>DH 25 (RA)</b> <b>RVR 130 m</b>	One engine operative <i>Flaps 30</i> <b>DH 50 (RA)</b> <b>RVR 130 m</b>
<b>PFD</b>	<i>LAND 3</i>	<i>LAND 3</i>	<i>LAND 3</i>	<i>LAND 3</i>

# A320

FAIL-PASSIVE LANDING			
ACFT	Cat IIIA		Cat IIIB
A320 FAIL-PASSIVE LDG	DH 50 (RA) RVR 200 m	One engine operative DH 50 (RA) RVR 200 m	Not authorised
	FMA	CAT3 SINGLE	CAT3 SINGLE

A320 : autoland mandatory for CAT III.

FAIL-OPERATIONAL LANDING			
ACFT	Cat IIIA	Cat IIIB	One engine operative approach not to be planned. Reverts to Fail-Passive per electric GEN. Design. Airbus.
A320 FAIL-OPERATION. LDG	AH 100 DH 20 (RA) RVR 200 m	AH 100 DH 20 (RA) RVR 75 m	
	CAT3 DUAL	CAT3 DUAL	

AH is the alert height above ground level.

→ Above AH, a go-around must be initiated if a failure affects the fail-operational landing system. Below AH, the approach will be continued (except if AUTOLAND warning is triggered).

Decision height is the wheel height above the runway elevation by which a go-around must be initiated unless adequate visual reference has been established and the aircraft position and approach path have been assessed as satisfactory to continue the approach and landing in safety (JAA).

An Alert Height is a height above the runway, based on the characteristics of the aeroplane and its fail-operational automatic landing system, above which a Category III approach would be discontinued and a missed approach initiated if a failure occurred in one of the redundant parts of the automatic landing system, or in the relevant ground equipment (ICAO). The AH is evaluated during aircraft certification; it is set at 100ft for A320 and 200ft for A330, A340.

# E175

ACFT	Cat IIIA	Cat IIIB
EMB 170-195	DH 80 (RA) RVR 200 m	Not authorised
	AUTOLAND	

The Embraer E-jets are certified for CATIIIa fail-passive landings.

CAT IIIa : 50ft ≤ DH < 100ft and RVR ≥ 200m



# DHC-8D

## Autopilot operation :

Not to be engaged below 1000ft AGL.

Disengaged latest at 1000 ft unless:

- NPA at/above 200ft
- Cat I ILS at/above 160ft
- CATII at/above 80ft
- Cat IIIA at/above 50ft .

## FMS guideline

The approach segment must NOT be edited or it will void the approach. An edited approach, including approach label and \* EOA \* , will violate the integrity of the approach segment and these waypoints can no longer be flown as an FMS approach.

$$DH_{CAT I} = \max \{200 \text{ ft} ; \text{OCH}\} \rightarrow \text{DA} \quad (\text{regulations})$$

$$DH_{CAT II} = \max \{100 \text{ ft} ; \text{OCH}\} \leq 200 \text{ ft} \quad (\text{regulations})$$

ACFT	NPA (NDB)	NPA (RNP APCH, VOR, VOR/DME, LOC)	Cat I + LPV *	Cat II
Dash-8 Q400	<u>As published.</u> Comply with $DH \geq 350 \text{ ft} \rightarrow \text{MDA}$	<u>As published.</u> Comply with $DH \geq 300 \text{ ft} \rightarrow \text{MDA}$ $RVR \geq 800 \text{ m}$	<u>As published.</u> LPV not authorised ** Comply with $DH \geq 200 \text{ ft}$ converted into DA and $RVR \geq 400 \text{ m}$	<u>As published.</u> Comply with $100 \leq DH (RA) \leq 200 \text{ ft}$ $RVR \geq 300 \text{ m}$
	<b>Autopilot operation:</b> Disengaged at MDA at the latest		<b>Autopilot operation:</b> Disengaged at DH minus 40 ft at the latest	<b>Autopilot operation:</b> Disengaged at DH minus 20 ft at the latest

\* Single policy for all types of CAT I approved approaches and for RNP LPV (APV SBAS) operations.

\*\* except for dual UNS1-Ew with Localizer Performance with Vertical Guidance (LPV)-capability and qualified crew.

ACFT	Cat IIIA		Cat IIIB	
Dash-8 Q400 (Fail-passive)	$DH 50 (RA)$ $RVR 200 \text{ m}$ Not authorised *	One engine operative Not authorised Revert to CAT II	Not authorised	/
	<b>Autopilot operation :</b> Disengaged at 50 ft at the latest**			

\*except for HEADUP GUIDANCE SYSTEM equipped ACFT and qualified crew.

\*\* hand-flown approach from 50 ft at the latest but from 500 ft recommended, then captain takes over controls at 50 ft.



## Non-precision approaches

**Note for all aircraft.** Continuous descent approach methods during the final approach of a non-precision approach often lead to the use of a DDA (derived decision altitude). The DDA is calculated from an MDA for a non-precision approach, by adding some feet of margin. Upon DDA, it's either the landing or the go-around decision (something operationally close of precision approach procedures). At Transavia.com we don't use the DDA and keep the Minimal Descent Altitude concept, because it is clearly associated with non-precision approaches. There is no conceptual confusion between non-precision and precision approaches possible. And we don't want it to happen in our airline. If you reached the MDA without possibility to identify the runway and fly below the MDA, keep the MDA and until reaching the missed-approach point (MAPt) execute the missed-approach procedure.

