# 4 RUNWAY DATA AND AERODROME FACILITIES

Runway data and aerodrome facilities (including communication facilities and navigation aids) are provided on the aerodrome specific charts. In addition, Chapters x provides additional Riyadh Air specific aerodrome information and authorization details supplementary to the information provided on the aerodrome charts.

## 4.1 AERODROME REFERENCE CODE

The following table provides the wingspan, length, and ICAO Aerodrome Reference Code for Riyadh Air aircraft.

| Aircraft Code | Aircraft Type | Wingspan (m) | Length (m) |
|---|---|---|---|
| E | Boeing 787-9 | 60.12 | 62.81 |

*Table 4 - Aerodrome Reference Codes*

## 4.2 RUNWAY REQUIREMENTS

Under normal operational conditions, the table below outlines the minimum runway requirements for each aircraft in Riyadh Air's fleet, categorized by fleet type.

| Fleet | Minimum Landing Distance Available | Minimum Runway Width | Pavement Classification |
|---|---|---|---|
| B787 | 2100 meters | 45 meters | Compatible with planned weights or in accordance with the dispensation specifications received from the relevant airport authority |

*Table 5 - Runway Requirements*

***Note:*** *Refer to OM A Chapter 8.1.2.6.3 for information on minimum cleared or treated runway width operations.*

## 4.3 MINIMUM PAVEMENT STRENGTH

All destinations and alternate aerodromes nominated in the OM-C must meet the charted Pavement Classification Number (PCN) requirements for the applicable aircraft type or have received a special dispensation from the relevant Regulatory Authority of the aerodrome prior to use.

The Performance Department at Riyadh Air is responsible for verifying the compatibility of aircraft with airport surfaces by comparing the Airplane Classification Number (ACN) against the Pavement Classification Number (PCN) of designated aerodromes. The department then compiles and publishes the PCN-limited Maximum Taxi Weights (MTW) within the applicable Aerodrome Brief in OM-C.

Subsequently, the Navigation Department incorporates MTW published values into the LIDO Flight Planning system. This ensures that the weight limitations are factored into the flight planning process.

***Note:*** *When a dispensation has been received, OCC shall publish this in a Company NOTAM. The NOTAM must include the validity of the dispensation and the maximum permitted operating weight.*

## 4.4 RUNWAY PERFORMANCE CALCULATION

All take-off and landing performance calculations shall be done utilizing the OEM OPT EFB application or by referring to other approved Riyadh Air documentation. The PIC shall ensure that the actual take-off and landing weight does not exceed the maximum take-off and landing weight calculated and take into account any performance-related restrictions.

The PIC shall determine that take-offs and landings are safe with regard to runway conditions and shall use actual runway surface conditions to conduct take-off and landing performance calculations. If a runway condition report contains various runway condition codes (RWYCC) and/or grades of contamination, the PIC shall use the most conservative for the take-off and landing calculations.

For further information, refer to the OEM OPT user guide.

***Note:*** *If flight crew are unable to calculate performance data using the Boeing OPT, the Performance Department can compute the required take-off weight or landing weight using the Boeing Performance Engineering Tool.*

### 4.4.1 Global Reporting Format (GRF)

The Global Reporting Format is a globally harmonized methodology for assessing and reporting runway surface conditions. The GRF was developed by ICAO to help mitigate the risk of runway excursions.

The GRF allocates a runway condition code (RWYCC) to each third of a runway. The code is complemented by a description of surface contaminant, including type, depth, and amount of coverage, using a harmonized set of descriptors. The RWYCCs, which range from 0 for a very slippery surface to 6 for a dry surface.

***Note:*** *Flight crew shall utilize the Onboard Performance Tool (OPT) in conjunction with the reported Runway Condition Code (RWYCC) and runway condition assessment matrix (RCAM) when calculating both takeoff and landing performance.*