



## SG Series Heavy Duty Sliding Gates



### General Description

SG Series OPTIMA sliding gates are designed for high traffic, military, commercial and industrial applications. Standard gate height is 2.5 m OPTIMA designs and manufactures gates up to 3 m heights. There is not a standard length for sliding gates but gates up to 12 m have already been designed and manufactured. The main frame of the sliding gate is 80x80x4mm box beam. Vertical bars are made from 80x40x2.5 mm box beam which are placed 130mm apart from each other. Generally, top of the sliding gate is serrated. Lower part of the gate is closed by 3mm thickness sheet metal to a height 1 m upon which "STOP" sign and yellow/black paint is applied. The buttresses are manufactured from 80x80x3mm box beams. These are 2 or 4 polyamide rollers which keep the door vertical and in line. Polyamide rollers have to reduce noise during operation. These rollers can be adjusted horizontally to keep the sliding gate exactly vertical. Buttresses are fixed to the ground by steel anchors.

The thickness of the hardened steel wheels are 60mm with an outer diameter 150 mm. The plates connecting the wheels to the gate structure is 10mm each. Both sliding gate and the buttresses are galvanized (60 micrometers) and then painted to black with yellow stripes. There is a "STOP" sign in the middle of the gate. All the designs of OPTIMA are made by Finite Element Analysis according to K12 standards.

When used with OPTIMA ESGO 4000, sliding gates with a weight up to 4000kg can be operated. With the help of the frequency controller any type of speed control like slow start, fast linear motion and slow stop, can be achieved. This facility brings increased vehicle passing capacity without losing any degree of security.

