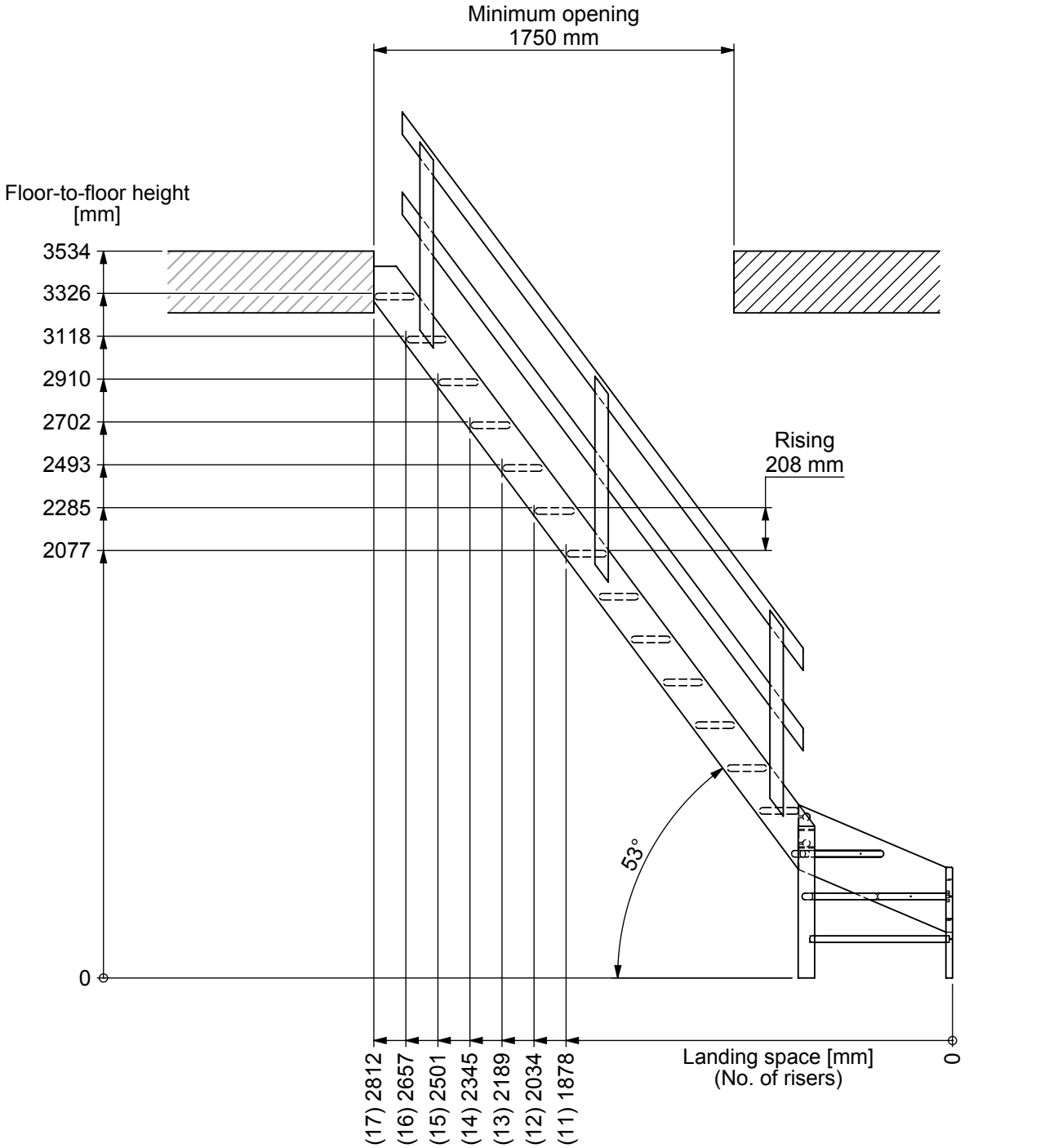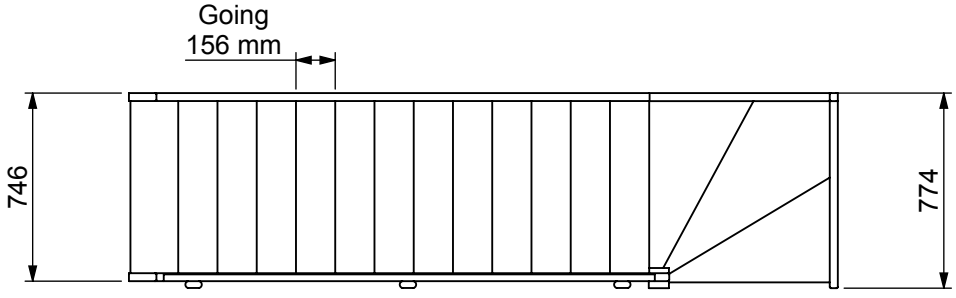Bottom quarterturn