

ABSTRACT

The present invention relates to a tunneling method, and more particularly, to a tunneling method of installing both of an internal pre-support member or an external pre-support member, and a post support member, and an apparatus therefor. 5 The tunneling method includes: excavating a pilot tunnel 3 in a main tunnel 2 to be constructed; radially forming a drilled hole from an excavation surface of the pilot tunnel 3 to a tip end of an internal pre-support member 4 of the main tunnel 2 at a plurality of locations in the pilot tunnel 3 to install 10 the pre-support member 4; inserting the internal pre-support member 4 into the drilled hole, and conducting grouting and performing curing to fix the internal pre-support member; excavating the tunnel in stages in a longitudinal direction 15 along an excavation line of the main tunnel 2 and primarily spraying shotcrete to an excavation surface of the main tunnel in the main tunnel; installing a post-support member 5 between a plurality of internal pre-support members 4 in the excavation surface of the main tunnel to which the shotcrete is primarily 20 sprayed; and connecting the internal pre-support member 4 and the post-support member 5 with a plate type support member.