Earth Pressure and Earth Retaining Structures Third Edition

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Earth pressure is the horizontal force on a retaining wall due to the weight of the earth behind it. The Earth holds up heavy retaining walls. Because of soil friction, these structures can support their loads. Earth pressure can cause retaining walls to fail. To prevent this failure, retainers must be designed to accommodate the earth’s forces. Earth pressure acts against the retaining wall. It can be divided into two types: active and passive. Active pressure is the horizontal force required to hold the earth in place. Passive pressure is the horizontal force that pushes the earth back against the retaining wall. This force is greatest when the wall is pushed inward. Earth pressure is a critical factor in the design of retaining walls. Engineers must consider earth pressure when designing retaining walls. They must account for the forces acting on the wall to ensure its stability. Earth pressure is a complex phenomenon that involves many factors. These factors include soil type, wall type, and wall height. Engineers must analyze these factors to calculate earth pressure. Calculating earth pressure involves using mathematical models and computer programs. These models and programs help engineers predict the forces acting on the wall. Calculations are necessary to ensure that the retaining wall will be able to withstand the earth’s force. These calculations are critical in the design process. Earth pressure is a vital factor in the design of retaining walls. Engineers must consider it when designing these structures. It is necessary to account for the forces acting on the wall to ensure its stability. Calculations are necessary to ensure that the retaining wall will be able to withstand the earth’s force.