

or other exposed surfaces will be damaged when the carbon dioxide content reaches a high level. When carbonation has taken place, the only way to correct the damage is to grind down the soft surface of the concrete until a firm surface is reached. This is an expensive operation.

ELECTRIC LIGHTING

Because of the shorter days and cloudy weather associated with the winter months in Canada, artificial illumination must be provided on most construction jobs. It is generally considered that for construction work, a light intensity of 10 foot-candles must be provided for the ordinary construction operations. On small construction jobs this usually involves between 5 and 10 100-watt bulbs per 1000 square feet of area. Where power lines are already installed, no difficulty is experienced in obtaining a temporary power line to the job for the operation of electrical equipment as well as lighting equipment. Portable generators, of which there are a large number on the market, can be used where power lines are not available.

CONCLUSION

This bulletin has attempted to indicate some of the techniques used in Canada by contractors working throughout the winter months. There is little to be found in these pages which will be new to those familiar with winter construction but it is hoped that many contractors who in the past have stopped construction in the late fall, will be encouraged to so plan their construction that it will be possible for them to continue throughout the winter months. It should be pointed out that while many protective measures must be taken during the winter, good control can be maintained of the various jobs associated with construction work. This often results in a superior structure over one built, for example, during extremely hot summer weather when it is very difficult to provide protective measures for concrete and masonry.