TEXAS DEPARTMENT OF LICENSING AND REGULATION

RPM DIVISION – INDUSTRIALIZED HOUSING AND BUILDINGS

P.O. Box 12157 • Austin, Texas 78711 • (512) 539-5735 • (800) 803-9202 • FAX (512) 539-5736

Email Address: ihbtech@tdlr.texas.gov • Internet Address: www.license.state.tx.us

Industrialized Housing and Buildings
Technical Bulletin

IHB TB 10-02 – Separation of Exits – Classroom Buildings
Applicable Code: 2006 IBC – No longer applicable as of July 1, 2012

Issued January 13, 2010

At their meeting of October 15, 2009, the Texas Industrialized Building Code Council (Council) decided that the exterior doors of a small classroom building did not have to be separated by ½ the length of the maximum overall diagonal of the building in accordance with sections 1019.4 and 1015.2.1 of the International Building Code (IBC). ***The decision only applies to classroom buildings that are a maximum of 1,600 sf containing no more than 2 classrooms, a maximum occupant load of 49 students per classroom, and a permanent full height partition with connecting door between the classrooms.*** The Council determined that the same level of safety was obtained by this configuration as one where the classrooms had no connecting door. In this case, i.e., no connecting door between the classrooms, the International Building Code would not require the separation of the exits from each classroom as each classroom space only requires one exit.

***Note that this decision does not apply to daycare facilities with children under 2 ½ years of age.*

The following examples are provided to demonstrate this concept.

1. **Given:** A classroom building 64' x 24' or 1,536 sf, containing 2 classrooms, occupancy group E, *no connecting door in the permanent full height partition between the classrooms*. Each classroom is 768 sf with an occupant load of 39 occupants per classroom (reference Table 1004.1.1 of the IBC). Each classroom has an exit door to the exterior of the building. The exit door for each classroom is located on the same side of the building close to the connecting partition wall between the classrooms.

   How many exits are required and are the exits required to be separated?

   Solution: One exit is required from each classroom. No separation of exits is required.

   Discussion: Section 1019.2 of the IBC: Only one exit shall be required in a single-level building with the occupied space at the level of exit discharge provided that the space complies with Section 1015.1 as a space with one means of exit. Table 1015.1 of the IBC only requires one exit from a space in occupancy group E with an occupant load of 49 or less. Therefore, the exits as described above are adequate.

2. **Given:** A classroom building 64' x 24' or 1,536 sf, containing 2 classrooms, occupancy group E, *with a connecting door in the permanent full height partition between the classrooms*. Each classroom is 768 sf with an occupant load of 39 occupants per classroom (reference Table 1004.1.1 of the IBC). Each classroom has an exit door to the exterior of the building. The exit door for each classroom is located on the same side of the building close to the connecting wall between the classrooms.

   How many exits are required and are the exits required to be separated?

   Solution: The code requires two exits from the building placed at a distance apart equal to not less than ½ the length of the maximum overall diagonal dimension of the building. *However, based on the Council's decision, the separation of the exits will not be required.*

   Discussion: The interconnection of the two classrooms creates a "space" per Section 1015.1, thereby requiring two exits based on an overall occupant load of 78 persons. It then follows that the exit separation is based on ½ the diagonal of the space created by the two classrooms. However, the exit condition has not been improved exit-wise or made safer by eliminating the connecting door. The degree of fire exposure is minimized because the connecting door is typically closed during hours of operation and there is no requirement in the code for the classrooms to be separated by fire rated construction or assemblies.