

Small Residential Board and Care Occupancies

Life Safety Code Requirements, Plan Review Services and Inspection Practices of the Office of the Illinois State Fire Marshal's Fire Prevention and Technical Services Divisions

Effective January 1, 2020

INTRODUCTION

The information contained in this document is intended to answer some of the more common questions that residential board and care home owners/operators may have about the Office of the State Fire Marshal (OSFM) Fire Prevention and Technical Services Divisions inspection and plan review processes and the *Life Safety Code* that is used to confirm these facilities are in compliance with OSFM's requirements.

At this time OSFM is not aware of any "across-the-board" statewide licensing program for residential board and care homes. One point of confusion on this matter is the fact that residential board and care homes are rarely labeled as such. These occupancies are identified by a variety of names including: Community Residential Alternatives, Community Residential Facilities, Halfway Houses, Rehabilitation Homes, Community Integrated Living Arrangements (CILA), Transitional Facilities, Shelter Homes, etc and are generally licensed by the Illinois Department of Human Services (IDHS) or the Department of Children and Family Services (DCFS). The types of residents living in these facilities are as varied as the names given to the facilities and may include: drug and alcohol rehabilitation clients, residents being transitioned from prisons to independent living, mentally challenged residents that have been de-institutionalized, minors under the jurisdiction of DCFS, and the elderly who need assistance in their everyday living requirements. Residents of the facilities listed above should not be of type that require health care or nursing care. Because of the wide variety of clients and their needs, residential board and care occupancies fall under the licensing jurisdiction of different state agencies and their various licensing regulations. Regardless of this variety of responsible agencies and their regulations, fire safety requirements applied by the OSFM do not vary based upon the state-licensing agency that regulates the occupancy.

The OSFM is concerned with the potential fire threat presented by residential board and care homes. Historically, these occupancies have exhibited a high number of fires and fire deaths relative to the general population. The National Fire Protection Association (NFPA), which tracks fires on a nationwide basis, offers the following list of just some of the tragic fires in residential board and care homes (see also a note * attached to the NFPA list on the next page):

Commentary Table 32/33.1 Residential Board and Care Multiple-Death Fires

Year	Location	Fatalities
1990	Georgia	4
1990	Texas	4
1990	Bessemer, AL ¹	4
1990	Wisconsin	3
1991	Colorado Springs, CO1	10
1992	Detroit, MI ¹	10
1993	Texas	3
1994	Alabama	6
1994	Broward County, FL ¹	6
1995	Mississauga, Ontario ¹	8
1995	Oregon	4
1995	California	3
1995	Michigan	3
1996	Connecticut	3
1996	California	3
1996	Laurinberg, NC ¹	8
1996	Shelby County, TN1	4
1996	Ste. Genevieve, Quebec1	7
1996	Pennsylvania	4
1997	Harveys Lake, PA ¹	10
1998	Arlington, WA1	8
2000	Pennsylvania	3
2003	California	4
2004	Pennsylvania	3
2004	Tennessee	5
2006	Missouri	11
2009	Wells, NY	4
2011	Marina, CA	5
2012	San Antonio, TX	4

¹NFPA fire investigation report.

Source: NFPA, Fire Incident Data Organization (FIDO).

^{*}More recently, three residents died in a group home fire in Fond du Lac, WI on September 19, 2019.

OFFICE OF THE ILLINOIS STATE FIRE MARSHAL (OSFM)

The OSFM has the statutory responsibility of protecting the citizens of Illinois against the hazards associated with fire. In an effort to carry out this responsibility the OSFM operates several divisions covering multiple areas of life safety concern. Included among those divisions is the Division of Fire Prevention, which is charged with the writing, adoption, and enforcement of statewide fire prevention regulations and the inspection of occupancies for compliance with those same regulations. Since it is beyond the capacity of the Fire Prevention Division to enforce regulations in every building across the entire state, the Division concentrates on inspecting state-owned and state-licensed occupancies as well as specific targeted hazards in an effort to make the best use of its resources.

While the OSFM is willing to assist potential residential board and care owners or operators with their understanding and application of fire safety requirements, on-site assistance in the form of inspection of proposed buildings not yet being used as licensed residential board and care facilities is not done by Fire Prevention. Therefore, this document was prepared in an effort to assist potential residential board and care owners or operators with understanding the necessary features that should be looked for when choosing an appropriate location for a residential board and care facility.

The OSFM Technical Services Division, working in support of the Fire Prevention Division, often conducts plan review and code interpretation in residential board and care home occupancies, at no cost to the owners or operators. While this would be a valuable service to take advantage of, there are no state requirements that plans be submitted to the Technical Services Division. See the end of this document for more information on these no-cost reviews.

WHAT IS THE LIFE SAFETY CODE?

The regulations that are applied to residential board and care homes are found in 41 Ill. Adm. Code 100. The OSFM has adopted the 2015 edition of NFPA 101, *Life Safety Code* (LSC). The LSC is published by the National Fire Protection Association. It is a consensus code document that is developed by a committee of experts under code-making rules which cover NFPA's standard and code development process. The members of the LSC technical subcommittee that consider changes to the LSC represent not only enforcement authorities, but also the insurance industry, architects, engineers, and representatives of the owners of regulated occupancies.

Formulated in the early part of the 1900's as a code to ensure safe exiting from buildings, the LSC was originally titled the *Buildings Exit Code*. In 1966, the title was changed to the *Code for Safety to Life from Fires in Buildings and Structures*. In 1997 the title was officially changed to the *Life Safety Code*. The LSC is updated on a three-year cycle. The LSC contains separate occupancy chapters to address specific types of building uses. Therefore, the requirements applicable to residential board and care facilities are tailored specifically for such occupancies.

The chapters for residential board and care occupancies were first introduced in the 1985 edition of the LSC as a hybrid of healthcare and residential occupancies in response to the increasing number of assisted living facilities and group homes being constructed in the U.S.

WHERE DO I GET THE LIFE SAFETY CODE?

The LSC is a copyrighted document and cannot be reproduced by the OSFM. The LSC is available for on-site examination at any of the OSFM's three regional offices. It can also possibly be found at your local library or fire department. If the local library does not have a copy, ask the reference librarian to see if it can be obtained via inter-library loan. NFPA offers a free "read-only" access to all of their codes and standards. Go to www.nfpa.org to gain access to this code list. The LSC may also be purchased from the NFPA by calling their toll-free order line at 1-800-344-3555 or going to www.nfpa.org and clicking the "catalogue" tab. Remember to request the 2015 edition of the LSC.

LOCAL REGULATIONS

The regulations of the OSFM do not automatically supersede the regulations, ordinances, or rules established by other authorities such as counties, local fire departments, or fire protection districts. However, OSFM's authority is not superseded in those jurisdictions that choose to adopt our code as well as those jurisdictions that do not have home rule or approved equivalency pursuant to Title 41 Ill. Adm. Code 100 (Part 100). Local authorities may enforce regulations concerning residential board and care facilities that are more stringent than OSFM's regulations. Therefore, the OSFM recommends that owners and operators always make contact with local authorities before finalizing residential board and care facility plans.

INSPECTION PROCEDURES

Before a field inspection can be conducted, OSFM must receive written notice of the need for a facility inspection from the appropriate licensing agency. *Owners and operators must first contact their applicable licensing agency to initiate the inspection process.* Then that licensing agency shall contact OSFM to arrange for the facility inspection. Once arranged, the inspection will be conducted by a uniformed inspector from the OSFM Fire Prevention Division.

The OSFM realizes the security concerns of residential board and care owners and operators regarding the admission of outsiders into their facilities. Residential board and care owners and staff should know that OSFM fire prevention inspectors who conduct on-site fire safety inspections will always:

- Drive state vehicles that are plainly marked as representing the Office of the State Fire Marshal, and
- Carry, and present if asked, an OSFM photo-identification card.

The on-site inspection conducted by the OSFM is a "hands-off" non-destructive process. This means that although the inspector will need to examine all levels and all rooms of the residential board and care facility, they will not need to conduct actions such as dismantling equipment, activating fire alarm systems, flowing water through sprinkler systems, poking holes in walls, or other invasive procedures.

Upon completion of the inspection, the inspector will conduct an "exit interview" with the on-site owner/operator or their designee. This exit interview serves to inform the owner of any LSC violations that were noticed by the inspector, and at the same time offer suggestions of possible corrective actions.

A copy of the inspection findings will be completed by the inspector and left with the facility owner or their representative at the time of the inspection. Additionally, following the inspection, the inspector will send the inspection report to their direct supervisor for review. Following this review, an official correspondence will be sent to the owner or building representative regarding the findings from the inspection. The OSFM encourages that no action be taken by the owner of the facility relative to an inspection until this official written correspondence is received by the owner. These inspection findings will also be shared with the responsible state agency licensing office that requested the inspection.

If no violations were noted in the inspection report, OSFM's Fire Prevention Division involvement is finished until the next requested licensing inspection. If violations were noted, the inspector will only conduct re-inspections when such is requested by the assigned state licensing agency representative assigned to monitor the facility's progress in correcting the violations. The owner shall contact their licensing agency with any questions regarding the inspection results, the time frame for compliance, or other related questions. OSFM can assist the licensing agency with technical support regarding correcting the inspection findings. However, OSFM will not negotiate or establish any time frame with the state licensing agency or the facility owners regarding the abatement of the cited violations.

Once the owner has corrected all violations, the owner should contact their licensing agency representative who will then contact OSFM's Fire Prevention Division in order to place the reinspection on the inspector's schedule. Facilities that fail to correct violations will not receive an approval inspection supplied to the Illinois Department of Human Services or other assigned state licensing agency from OSFM. Facilities that attempt to operate without correcting violations cited during the Fire Prevention inspector's inspection or without a current state license are subject to prosecution through enforcement policies and procedures established by their state licensing agency.

RIGHT TO APPEAL

Regarding appeals of violations found during a Fire Prevention Division inspector's LSC facility inspection, the owner or operator of the residential board and care facility shall contact their state licensing agency. OSFM will provide support to the state licensing agency regarding the interpretation of the violations as written, not the facility owner or operator.

RESIDENTIAL BOARD AND CARE HOME CLASSIFICATIONS UNDER THE LIFE SAFETY CODE

Deciding which chapters of the LSC apply to a particular residential board and care occupancy is a matter of determining four factors:

- 1. Whether the board and care home is classified as a "new" or as an "existing" facility;
- 2. Whether the facility qualifies as a "conversion" occupancy;
- 3. How many clients are being served in the home, and
- 4. The applicable "evacuation capability" of the facility.

1. "New" Has a Variety of Meanings Under the LSC

The requirements of the "new" occupancy chapters of the 2015 edition of the LSC are applicable to "new" residential board and care facilities, which are facilities constructed on or after January 1, 2020. This often causes potential residential board and care operators to seek a building that was constructed prior to January 1, 2020 for conversion into a residential board and care facility in an effort to avoid the "new" LSC requirements. However, it must be understood that depending upon the occupancy classification of the building constructed prior to January 1, 2020, the requirements of "new" may still apply. If a residential board and care facility was constructed on or after January 1, 2002 it was considered a new residential board and care facility under OSFM's previous adoption of the 2000 edition of the LSC. Under the new 2015 edition of the LSC this same residential board and care facility would be considered an existing residential board and care facility because it was in existence prior to January 1, 2020. But it is very important to understand that the LSC does not permit the reduction of existing life safety and fire protection systems. Therefore, the residential board and care facility is required to maintain their facility, at a minimum, in accordance with Chapter 32 of the 2000 edition of the LSC. The requirements of Chapter 33 of the 2015 LSC edition would also apply, including the requirement to maintain the facility's existing life safety and fire protection system requirements from the 2000 LSC edition.

2. Conversion Occupancies

The 2015 edition of the LSC recognizes that existing residential type occupancies (e.g., single family dwellings, lodging houses, hotels, motels, apartment buildings) as well as former health care occupancies are often converted into residential board and care occupancies. If this conversion occurred after January 1, 2020, then the "new" residential board and care occupancy chapter of the 2015 LSC applies. However, as the result of the building previously having served as a residential or health care occupancy, the LSC allows the building to be deemed a "conversion". As a conversion, the LSC allows some relaxed requirements compared to those applicable to a newly constructed residential board and care home, the most important of which is the elimination of the requirement for sprinkler systems.

3. Number of Residents (Large vs. Small Facilities vs. One- and Two-Family Dwelling)

The LSC also classifies residential board and care occupancies as either "small" or "large" dependent upon the number of residents in the facility. Facilities that serve 16 or fewer residents (not counting staff) are classified as "small" facilities. Those facilities which serve greater than 16 residents (again, staff not included) are classified as "large" facilities. Although all Illinois Community Integrated Living Arrangement (CILA) occupancies will be classified as "small" under the LSC as the result of client limitations in licensing rules, other types of residential board and care homes may serve more than 16 residents and if so be classified as "large" residential board and care occupancies. The significance of this distinction is that the LSC's requirements for large facilities are more stringent than those for small facilities.

This document addresses only "small" residential board and care facilities.

In addition to classifying facilities as either large or small, the facility could also be classified as a One- and Two-Family homes as defined by the LSC.

Residential Board and Care Occupancies (if the facility houses four or more clients)

-OR-

Single- and Two-Family Dwellings (if the facility houses three or fewer clients)

If four or more residents are housed in a residential board and care facility, the residential board and care chapter is used. The occupancy must then be further sub-classified as "small" or "large" depending upon the number of residents served.

If three or fewer residents are housed in a residential board and care home, the facility is classified pursuant to Chapter 24 of the LSC.

4. Evacuation Capability Rating of the Home

Once the classification of an occupancy as "large" or "small" is determined, the occupancy will also receive another subclassification based upon the ability of the residents to reach a point of safety during a fire or other emergency requiring evacuation. These subclassifications are identified as "prompt", "slow", or "impractical". The LSC defines the ability to escape as the "Evacuation Capability Rating" of the facility.

The evacuation capability classification only applies to defined existing residential board and care facilities. The use of evacuation capability was removed from "new" residential board and care occupancy chapters in the 2003 edition of the LSC.

The evacuation capability rating is important when classifying residential board and care facilities. The LSC imposes more stringent fire safety requirements as a facility's evacuation capability becomes slower. Slower evacuation capabilities usually result from the introduction of less mobile residents or the presence of fewer staff members who can assist with evacuation. The evacuation capability rating of a residential board and care home is determined by the staff of the facility conducting fire drills and documenting the time necessary to evacuate all residents. Fire drills are required to be conducted not less than six times per year on a bimonthly basis, with not less than two drills conducted during the night when residents are sleeping. The LSC requires that if evacuation drill documentation is not maintained or presented, the facility shall be classified as the worst possible evacuation capability, which is "impractical." This results in the home being subjected to the most stringent of LSC requirements, including sprinkler protection. In approximate measures, the following evacuation times for a facility are parameters used to determine the evacuation classification:

- <u>Prompt</u>. All residents are able to move to a point of safety in three minutes or less from the time of alarm;
- <u>Slow</u>. All residents are able to move to a point of safety in over three minutes but not in excess of 13 minutes from the time of alarm;
- <u>Impractical</u>. Occupancy evacuation requires an excess of 13 minutes from the time of alarm to reach a point of safety.

It is important to note that the LSC prescribes varying levels of protection and code requirements based upon the evacuation capability rating for the facility. A facility which meets the LSC while housing "prompt" residents may not meet the code if a "slow" or "impractical" evacuation capability rating is assigned because of a change in the residents or staff.

The LSC requires that existing residential board and care facilities that experience a change in evacuation score to a slower rating, or a change in sub-classification from a small to a large facility, must comply with the requirements for "new" residential board and care facilities.

FIRE SAFETY EVALUATION SYSTEMS

The chapters of the LSC pertaining to residential board and care occupancies are unique because they provide an alternative compliance option know as a "Fire Safety Evaluation System" (FSES). An FSES is a point scoring system that can be used to determine the fire protection equivalency of features within a residential board and care occupancy which may differ from the prescribed requirements listed in the applicable chapter of the LSC. The FSES process and rating system are described in detail, and blank scoring forms are provided in the 2016 edition of NFPA 101A, *Guide on Alternative Approaches to Life Safety*.

While the OSFM will evaluate FSES documentation submitted by a board and care home owner, it will not prepare the FSES evaluation for a facility. The detail and complexity of an FSES requires several hours/days of work needed to document the fire protection features at a facility. Technical Services recommends that a fire protection engineer or architect familiar with the FSES process be contacted to conduct and submit the report if a facility intends to attempt to prove equivalency through the use of an FSES. The FSES is an NFPA-sanctioned process for proving equivalent fire and life safety to that provided by the prescriptive requirements of the LSC. As such, if a facility has proven equivalent life safety through the successful passing of an FSES, that facility will be considered codecompliant by the OSFM just as if the facility had passed an inspection applying the prescribed requirements of the LSC.

CODE REQUIREMENTS

The remaining pages of this document serve to review the major requirements of the LSC for new and existing *small* residential board and care facilities.

1. Primary Means of Escape

The term "means of escape" is a way out of a building or structure that does not conform to the strict definition of means of egress but does provide an alternate way out. The escape paths need not be the true exit access, exit, and exit discharge.

Every sleeping room and living area shall have access to a primary means of escape located so as to provide a safe path of travel to the outside of the building without the occupant traversing any corridor or space exposed to an unprotected vertical opening. Where the sleeping room is above or below the level of exit discharge, the primary means of escape shall be an enclosed interior stair, an exterior stair, a horizontal exit, or an existing fire escape stair. The lack of stairway enclosure is one of the most frequently encountered violations of the LSC. The majority of residential occupancies do not provide for the enclosure of interior stairways. The requirement prohibits an open stairway that serves as the building's primary escape route from a basement or upper level from being exposed to the elements on

the ground floor of the occupancy. Such a stairway is required to be separated from the remainder of the occupancy's areas by construction that provides at least a ½-hour fire-rated enclosure. While there are exceptions to the stairway enclosure requirements provided by the LSC, all of these exceptions require the facility to be protected throughout by an automatic sprinkler system.

In existing residential board and care homes with slow or impractical evacuation capability ratings, the primary means of escape for each sleeping room cannot be exposed to living areas or kitchens except in those facilities that are protected throughout by an automatic sprinkler system. This means that in a one story home, if the evacuation capability rating is not "prompt", there must be fire-rated barriers that separate the path of escape from sleeping rooms from all living areas and kitchens.

2. Secondary Means of Escape

In addition to the primary route, each sleeping room shall have a secondary means of escape or protection as follows:

- A door, stairway, passage or hall providing a way, independent of and remote from the
 primary means of escape, or unobstructed travel to the outside of the dwelling at street or
 ground level, or
- A passage through adjacent non-lockable spaces independent of and remote from the primary means of escape to any approved means of escape, or
- An outside window or door operable from the inside without the use of tools and providing a clear opening of not less than 20 in. in width and 24 in. in height and 5.7 ft² in area. The bottom of the opening shall not be more than 44 in. off the floor. Such means of escape shall be acceptable if: the window is within 20 ft of grade, or the window is directly accessible to fire department rescue, or the window or door opens directly onto a balcony.

Other factors taken into account are to establish whether a secondary means of escape is present or required include:

- Sleeping rooms that have a door leading directly to the outside of the building with access to
 the finished ground level or to a stairway that comply with the LSC shall be considered as
 meeting all the requirements for a second means of escape.
- Sleeping rooms shall not be required to have a secondary means of escape where the clinical
 needs of the residents require special security measure provided the building is protected
 throughout with sprinklers and a fire alarm, and smoke detection is installed in accordance
 with the applicable requirements of the LSC.
- A window located below the adjacent ground level and provided with a window well meeting the following criteria:
 - i. The window well should have horizontal dimensions that allow the window to be fully opened.
 - ii. The window well should have an accessible net clear opening of not less than 9 ft² with a length and width of not less than 36 in.
 - iii. A window well with a vertical depth of more than 44 in. should be equipped with an approved permanently affixed ladder or with steps meeting the following criteria:

- 1. The ladder or steps should not encroach more than 6 in. into the required dimensions of the window well.
- 2. The ladder or steps should not be obstructed by the window.

Amendments to the OSFM's adoption of the LSC permits the construction of a permanent ramp or staircase so the window sill will be within 44 in. of grade. The stair or ramp shall be at least the width of the window or a minimum of 36 in. in width, whichever is larger.

For existing residential board and care, the LSC allows a protection alternative to the secondary means of escape rather than a true path of escape. This alternative permits existing approved means of escape to be continued to be used.

It should be noted that the secondary means of escape is not necessary if the bedroom or living area has a door leading directly to the outside of the building, at or to grade level, or if the building is protected throughout by an automatic sprinkler system installed in accordance with LSC requirements.

No required path of travel to the outside from any room should be through another room or apartment not under the immediate control of the occupant of the first room or his family, nor through a bathroom or other space subject to locking.

3. Doors

Below are some of the major requirements related to doors found within a residential board and care facility:

- Doors may be of the swinging or sliding type.
- Doors in existing residential board and care homes shall not be less than 28 in. wide. For new residential board and care homes, doors must be a minimum of 32 in. wide unless the facility can qualify as a "conversion." Bathroom doors may be 24 in. in both new and existing occupancies.
- Every closet door latch should be such that residents can open the door from inside the closet. Every bathroom door lock should be designed to permit the opening of the locked door from the outside in an emergency. No door in any means of escape should be locked against egress when the building is occupied. All locking devices which impede or prohibit egress or which cannot be easily disengaged should be prohibited. Single-turn dead bolt type locks are permissible, but not a lock that would require special knowledge or the locating of a key to open the lock/door.
- Door-locking arrangements shall be permitted where the clinical needs of residents require specialized security measures or where residents pose a security threat, provided the following conditions are met:
 - i. Staff can readily unlock doors at all times in accordance with Sections 32/33.2.2.5.5.4 (below) and,
 - ii. The building is protected throughout with a sprinkler system.
 - iii. Provisions shall be made for the rapid removal of occupants by one of the following means:
 - 1. Remote control of locks from within the locked building

- 2. Keying of all locks to keys carried by staff at all times
- 3. Other such reliable means available to staff at all times.
- iv. Only one locking device shall be permitted on each door.

4. Hallways

Hallways and corridor widths are required to be a minimum of 36 in. in clear width except for existing approved hallway widths. Ceilings should be a minimum height of 7 ft with any projections in the hallway allowing not less than 6 ft 8 in. clearance.

5. Heating Equipment

No stove or combustion heater should be so located as to block escape in case of fire arising from malfunctioning of the stove or heater.

6. Minimum Building Construction Requirements

Requirements for minimum building construction are only found in Chapter 33 for existing small residential board and care occupancies and are based on evacuation capability classification for the facility.

• <u>Slow Evacuation Capability</u>. The facility shall be housed in a building where the interior is fully sheathed with lath and plaster or other material providing a 15-minute thermal barrier, including all portions of bearing walls, bearing partitions, floor construction, and roofs. All columns, beams, girders, and trusses shall be similarly encased or otherwise shall provide not less than a ½-hour fire resistance rating.

Exception No. 1: Exposed steel or wood columns, girders, and beams (but not joists) located in the basement.

Exception No. 2: Buildings of Type I, Type II(222), Type II(111), Type III(211), Type IV, or Type V(111) construction.

Exception No. 3: Areas protected by approved automatic sprinkler systems in accordance with 33.2.3.5.

Exception No. 4: Unfinished, unused, and essentially inaccessible loft, attic, or crawl spaces.

Exception No. 5: Where the facility can demonstrate to the authority having jurisdiction that the group is capable of evacuating the building in 8 minutes or less or achieves an E-score of three or less using the board and care occupancies evacuation capability determination methodology of NFPA 101A, Guide on Alternative Approaches to Life Safety.

• <u>Impractical Evacuation Capability</u>. Buildings shall be of any construction type in accordance with 8.2.1 other than Type II(000), Type III(200), or Type V(000) construction. Exception: Buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with 33.2.3.5 shall be permitted to be of any type of construction.

7. Defining a Story Within a Building

Refer to Title 41 Ill. Adm. Code 100.7(c)(7) to see options for defining the level of exit discharge (first floor of a building) or to define a story within a building.

8. Protection of Vertical Openings

Vertical openings are required to be protected so that no primary exit route is exposed to an unprotected vertical opening. The vertical opening is considered protected if the opening is cut off and enclosed in a manner that provides a smoke and fire resisting capability of not less than 30-minutes. Doors in the vertical opening must provide 20-minute protection and be self-closing and self-latching. There are exceptions to the vertical opening enclosure requirements when the building is protected throughout by an automatic sprinkler system. This is in addition to requirements above for primary means of escape.

9. Interior Finish

The interior finish on walls and ceilings of occupied spaces shall be Class A or Class B. Class C products are only permitted if the evacuation rating of the home is "prompt".

Interior finish relates to the flame spread (how fast the fire spreads across the interior finish) and smoke development (how fast the smoke obscures things such as exit signs) characteristics exhibited by products which might be attached to walls or ceilings in the occupancy. The requirements do not apply to normal thicknesses of paint on walls. Materials such as paneling, carpet on walls, or unfinished wooden walls/ceilings must meet interior finish criteria. This information is usually obtainable from the manufacturer of the products applied. The OSFM's Technical Services Division also maintains lists of the interior finish ratings of most types of wood. It is important to note that many existing interior finish products that do not meet the LSC requirements can be brought into compliance with the application of paint-like fire/flame retardant materials manufactured and rated for this purpose. Painted plaster, drywall or masonry walls present no interior finish consequences. However, application or presence of paneling, plastic materials, or carpeting in a vertical position or on ceilings may be causes for interior finish violations.

10. Separation of Sleeping Rooms

All sleeping rooms shall be separated from corridors by walls and doors that provide at least a 30-minute fire resistance rating. Doors shall be 1¾-in. solid-core. There can be no louvers or operable transoms or other air passages penetrating the wall except for properly installed heating and utility installations. Open air transfer grills are prohibited. Doors that separate sleeping rooms from corridors must be provided with latches or other mechanisms suitable for keeping the door closed. No door can be arranged so as to prevent the occupant from closing the door. Doors must be self-closing or must be automatic closing upon the detection of smoke.

In facilities with a prompt evacuation capability rating, the separation between sleeping rooms and corridors need only prevent the spread of smoke. In both new and existing facilities, if the entire building is protected by an automatic sprinkler system, then the self-closing devices on bedroom doors may be eliminated.

Staff may sleep in an unseparated area, but only if that sleeping area is located so the activation of the fire alarm/smoke detection system will alert the staff member.

11. Hazardous Areas

A hazardous area is any space that contains storage or other activity having fuel conditions that exceed that of a typical one- or two-family dwelling. Hazardous areas include, but are not limited to: areas for cartoned storage, food or household items in wholesale or institutional-type quantities, and concentrations or massed storage of residents' belongings. Areas containing approved, properly installed and maintained residential-type furnaces, heating equipment and furnace rooms; normal residential cooking, or laundry facilities are not classed as hazardous solely on the basis of such equipment. If hazardous areas are present they shall be protected as follows:

- If the hazardous area is on the same floor as, or is within or is adjacent to a primary means of escape or a sleeping room, then the hazardous area shall be protected by either enclosing the room with 1-hour fire-rated construction using 34-hour fire-rated doors that are self-closing and latching, or by using automatic sprinkler protection and an enclosure that will resist the passage of smoke. Doors only need to have a closing device.
- All other hazardous areas shall be protected by either ½-hour fire-rated construction using self-closing and latching solid-core doors that are at least 1¾ in. thick, or provide automatic sprinkler protection and an enclosure that will resist the passage of smoke. Doors only need to have a closing device.

12. Fire Alarm Systems and Smoke Detection

A means of manually activating the building's fire alarm system is required. This usually requires the presence of manual pull stations on each floor and at both required paths of escape from home. In existing residential board and care facilities the LSC permits one manual pull device per floor if there is an interconnected smoke alarm system in the facility. Additionally, the manual device does not have to be a "listed device" but may be as simple as the installation of electric bells and a clearly identified switch on each floor.

Smoke Alarms-New Facility. In new residential board and care facility, smoke alarms are required to be installed on all levels of the home, including basements, but excluding crawl spaces and unfinished attics. Additionally, smoke alarms must be installed for all living areas. (A "living area" is defined as: "any normally occupiable space in a residential occupancy, other than sleeping rooms or rooms that are intended for combination sleeping/living, bathrooms, toilet compartments, kitchens, closets, halls, storage or utility spaces, and similar areas.") These smoke alarms are required to be interconnected. The operation of any required interconnected smoke detectors must cause an alarm which shall be clearly audible over background noise levels with all intervening doors closed. The tests of audibility should be conducted with all household equipment which may be in operation at night in full operation (such as air conditioners and humidifiers.) These smoke alarms are not required if the building is protected throughout by an automatic sprinkler system. Additionally, in new facilities, each sleeping room is required to be provided with an approved, listed, smoke alarm. The sleeping room smoke detectors must still be provided regardless of whether or not automatic fire sprinklers are provided in the home. If hearing impaired residents are present, the alarm system must provide visual notification of system activation. In new residential board and care homes, all of the smoke alarms mentioned above must be powered by the building's electrical system. Battery-operated smoke alarms are not permitted in new facilities.

• Smoke Alarms-Existing Facilities. Existing facilities are required to have smoke alarms on all levels of the home excluding crawl spaces or unfinished attics, but rather than specifying their exact location by room, the LSC requires that the alarms be "audible in all sleeping areas". The LSC does not dictate that a smoke alarm be installed in each and every sleeping room. Also in existing occupancies only, if the residential board and care home is protected throughout by an automatic sprinkler system, then the smoke alarms may be battery-powered rather than having their power supplied by the building's electrical system. This allowance for the use of battery-operated smoke alarms is also dependent upon the owner having demonstrated a history of battery replacement, testing, and maintenance.

It should be noted that heat detectors are not recognized by the LSC or the OSFM as suitable replacements for smoke detectors, unless specifically permitted by the LSC.

13. Carbon Monoxide Detection

The LSC does not require carbon monoxide detection in residential board and care facilities. Illinois has passed the Carbon Monoxide Alarm Detector Act that is independent of the LSC. However, the Illinois Department of Human Services requires at least one carbon monoxide alarm is placed within 15 feet of every room used for sleeping. Owners are encouraged to check with the assigned licensing agency and local authorities concerning any additional requirements pertaining to the installation of carbon monoxide detection.

14. Automatic Sprinkler Systems

New residential board and care homes are required to be protected by an automatic sprinkler system that includes quick-response or residential sprinklers. An exception to this requirement is seen in "conversions" where sprinklers are not required when the evacuation capability of the residents is "prompt" and there are no more than eight residents living in the facility.

Design options that are allowed if the home is protected throughout by automatic sprinklers include:

- Elimination of the requirement to enclose most interior stairs forming the primary means of escape.
- Reduction in the classification of interior finish.
- Elimination of smoke alarms.
- Elimination of the need to provide a secondary means of escape from sleeping rooms.
- Elimination of door closing devices on bedroom doors.
- Elimination of the requirements to provide fire resistant mattresses or furniture.

Most existing residential board and care homes are not required to be protected by an automatic sprinkler system. Only existing residential board and care homes with an "impractical" evacuation capability are required to be protected throughout with automatic sprinklers. If such systems are installed to take advantage of "design options" offered within the LSC (see list above), then the activation of the extinguishing system must also activate the building alarm system. Additionally, in new sprinklered facilities only, where sprinklers are installed, protection is also required to be extended to roofed porches, roofed decks, and roofed balconies. In slow and impractical capability facilities, sprinklers are required to be installed in closets, in addition to other areas mentioned.

- Extension of Sprinklers into Attic Spaces-Residential Board and Care-Small Facilities. Normally, the sprinkler standards for small residential board and care do not require sprinklers in attic spaces. However, recent fatal fires indicated that changes were needed. The fatal fires were started by discarded cigarettes on exterior porches or in plantings outside of the facilities. The fires spread up to the attic spaces from the outside of the facility and overwhelmed existing sprinklers after fully involving unprotected attic spaces. As a result, requirements for protection in attic spaces were added in the LSC for new and existing facilities. It should be noted that this only applies to buildings that are already protected with sprinklers.
 - i. New Facilities Where the Attic is Used for Living Purposes, Storage or Fuel-Fired Equipment. These attic spaces shall be protected with automatic sprinklers that are part of the required, approved automatic sprinkler system installed throughout the rest of the facility.
 - ii. New Facilities Where the Attic is Not Used for Any Function Described in (i). Protection for an unused attic space in a facility that is protected with sprinklers shall meet one of the following criteria:
 - 1. Attics shall be protected throughout by a heat detection system arranged to activate the building fire alarm system in accordance with Section 9.6, or
 - 2. Attics shall be protected with automatic sprinklers that are part of the required, approved automatic sprinkler system in accordance with 9.7.1.1, or
 - 3. Attics shall be of noncombustible or limited-combustible construction, or
 - 4. Attics shall be constructed of fire-retardant-treated wood in accordance with NFPA703, Standard for Fire Retardant-Treated Wood and Fire-Retardant Coatings for Building Materials.
 - iii. Existing Facilities Where the Attic is Used for Living Purposes, Storage or Fuel-Fired Equipment. These attic spaces shall be protected with automatic sprinklers that are part of the required, approved automatic sprinkler system installed throughout the rest of the facility.
 - iv. Existing Facilities Where the Attic is Not Used for Any Function Described in (iii). Protection for an unused attic space in a facility that is protected with sprinklers shall meet one of the following criteria:
 - 1. Attics shall be protected throughout by a heat detection system arranged to activate the building fire alarm system in accordance with Section 9.6, or
 - 2. Attics shall be protected with automatic sprinklers that are part of the required, approved automatic sprinkler system in accordance with 9.7.1.1, or
 - 3. Attics shall be of noncombustible or limited-combustible construction, or
 - 4. Attics shall be constructed of fire-retardant-treated wood in accordance with NFPA703, Standard for Fire Retardant-Treated Wood and Fire-Retardant Coatings for Building Materials, or
 - 5. Attics shall be protected by heat alarms arranged to provide occupant notification in accordance with 33.2.3.4.2.

OPERATING FEATURES

Operating features are requirements found in each occupancy chapter that provides requirements for ongoing fire safety operations, such as fire drills, emergency planning, furnishings, and decorations. Operating features for residential board and care facilities are as follows:

- Hangings or draperies shall not be placed over exit doors. Mirrors shall not be placed in or adjacent to any exit in such a manner as to confuse the direction of exit.
- The administration of every residential board and care facility shall have in effect and available to all supervisory personnel, written copies of a plan for the protection of all persons in the event of fire and for their evacuation to areas of refuge and from the building when necessary. The plan shall include special staff actions including fire protection procedures needed to ensure the safety of any resident and shall be amended or revised upon admission to the home of any resident with unusual needs. All employees shall be periodically instructed and kept informed in respect to their duties and responsibilities under the plan. Such instruction shall be reviewed by the staff at least every two months. A copy of the plan shall be readily available at all times within the facility.
- All residents capable of assisting in their evacuation shall be trained in the proper actions to take in the event of fire. This training shall include actions to take if the primary escape route is blocked. If the resident is given rehabilitation or habilitation training, training in fire prevention and actions to take in the event of a fire shall be a part of the rehabilitation training program. Residents shall be trained to assist each other in case of fire to the extent their physical and mental abilities permit them to do so without additional personal risk.
- Fire drills are required to be conducted not less than six times per year on a bimonthly basis, with not less than two drills conducted during the night when residents are sleeping. Fire exit drills shall be conducted at least six times per year, two times a year on each shift. The drills may be announced in advance to the residents. The drills shall involve the actual evacuation of all residents to a selected assembly point and shall provide residents with experience in exiting through all exits required by the LSC. Exits not used in any fire drill shall not be credited in meeting the requirements of the LSC for facilities. Fire exit drills shall be documented in writing by attending staff. Information, at a minimum shall include date, time, names of staff present, names of clients present, exits used, evacuation time and any noted problems with the evacuation.
- The actual exiting from windows shall not be required to meet the requirements that the window be counted as a secondary means of escape.
- Fire exit drills shall be documented and available to the on-site fire prevention inspector to verify the evacuation capability rating of the facility.
- If smoking is permitted in these occupancies, noncombustible safety-type ash trays and receptacles shall be provided in convenient locations.
- New upholstered furniture within residential board and care homes is required to be tested to show resistance to cigarette ignition. This is a test performed and documented by the manufacturer, not the home owner. This is not required if the home is protected throughout by an automatic sprinkler system.

- New mattresses within residential board and care homes are required to be tested to show resistance to charring in accordance with Part 1632 of the Code of Federal Regulations. This is a test performed and documented by the manufacturer, not the home owner. This is not required if the home is protected by an automatic fire sprinkler system.
- Staff is required to be on duty and in the facility at all times when residents requiring evacuation assistance are present. There are no staff-to-resident requirements.
- Doors that swing in the direction of egress travel shall be inspected and tested not less than annually in accordance with Section 7.2.1.15.

BOARD AND CARE WITHIN AN APARTMENT BUILDING

The LSC prescribes special requirements for residential board and care occupancies that are located within an apartment building. The requirements are found in Section 32.4 and 33.4 of the LSC for new and existing residential board and care occupancies respectively.

The LSC requires that individual apartments used as residential board and care occupancies comply with the requirements reviewed earlier in this document for small residential board and care homes, while the other apartments and the common areas of the building (corridors, stairways, and means of egress from the apartment building) must comply with the LSC's requirements for Apartment Buildings found in Chapters 30 and 31. Depending upon the floor level upon which the residential board and care home is located and the overall building size (height and number of apartment units in the building), requirements can be added that regulate the types of materials from which the building may be constructed as well the need for a full fire alarm system in the apartment building.

Frequently, there is more than one apartment within an apartment building being used for residential board and care services. This has resulted in the OSFM making the following policy decisions relative to classifying apartment buildings containing one or more apartments which house residential board and care facilities:

- If only one apartment in the building is so designated, and that apartment houses three or fewer residents, the apartment is not classified as residential board and care and therefore the apartment and the entire building must simply comply with the "apartment building" occupancy requirements of the LSC.
- If there are three or fewer total residents in an apartment building, regardless of how many apartments they occupy, the building is not classified as residential board and care. Therefore those apartments and the entire building must simply comply with the "apartment building" occupancy requirements of the LSC.
- If there are four or more residents receiving personal care services within the building, even if those residents are in different apartments, then those apartments must comply with the "small" residential board and care requirements of the LSC, and the other areas of the building must comply with the apartment building requirements of the LSC.
- If there are a total of more than 16 residents receiving care within the building, even if those clients are in different apartments, then the entire facility/building will be considered a "large" residential board and care occupancy from the highest floor level housing clients and including all floors below that level. Floor levels above the highest level on which residential

board and care is found need only comply with the "apartment building" requirements of the LSC.

PLAN REVIEW SERVICES

The Technical Services Division of the Office of the State Fire Marshal will conduct a plan review of a proposed day care center at no charge to the owner, contractor, architect, or the local fire department. The plans are reviewed for compliance with applicable requirements of the LSC, its referenced standards, and any other applicable state fire prevention requirements. OSFM plan review does not ensure compliance with either the licensing agency standards or local regulations which may differ from the rules and policies of the OSFM. OSFM plan review is not mandatory for construction, renovation, or additions to a day care center, but it is strongly recommended. As OSFM does not issue construction permits, our plan review should be considered as guidance for the owner, contractor, or design professional toward compliance and successful final inspection by our Fire Prevention Division.

If you have questions about available plan review services, please contact the OSFM's Technical Services Division in the Chicago Office.

Office of the State Fire Marshal Technical Services 555 W. Monroe Street, Suite 1300N Chicago, IL 60661 312-814-8960 SFM.Techservices@illinois.gov

CONTACTS AND QUESTIONS

If you have questions pertaining to Residential Board and Care occupancies, contact your licensing agency representative or one of the regional offices of the OSFM Fire Prevention Division at SFM.FirePrevention@illinois.gov or use the contact information below:

Chicago Office 555 W. Monroe Street Suite 1300N Chicago, IL 60661 312-814-2693 **Springfield Office** 1035 Stevenson Drive Springfield, IL 62703 217-524-2174

APPENDIX A-IDENTIFYING CONSTRUCTION TYPES

The requirements of the LSC reviewed earlier in this report include references to the type of construction of the building. The construction type classification is directly related to the need for an automatic sprinkler system in the occupancy. Therefore, it is important to have a basic understanding of how construction types are classified.

The LSC refers to another NFPA standard, NFPA 220, Standard on Types of Building Construction, for construction type definitions. It is normally not necessary to purchase this standard as the type of construction can easily be determined. The standard first defines five different general "types" of construction. It should be noted that OSFM staff will not determine construction classification. This classification must come from existing architectural drawings, an architect, engineer, or contractor. OSFM has the right to not accept a third-party's classification:

Type	Common Name	Description
Type I	Fire Resistive	Usually masonry and concrete construction. No wood or unexposed steel members are used as means of support. Fire resistive construction is commonly used in high-rise building construction.
Type II	Non-Combustible	Masonry or other noncombustible exterior support walls with steel (usually bar joists or steel beams and columns) supporting floors and roofs.
Type III	Ordinary	Masonry exterior support walls with wooden floor and roof joists.
Type IV	Heavy Timber	Masonry exterior support walls with large dimension wood timbers used as columns, as well as floor and roof supports.
Type V	Wood Frame	Wooden exterior support walls and wooden floor and roof joists.

NFPA 220 Example

