# **3 CREATIVE CONCEPTS IN DUPLEX DESIGN**

Our House Review design team offers ideas for re-thinking the traditional duplex project.

#### By Larry W. Garnett, FAIBD, House Review Lead Designer

s demographic and economic forces create new demands for multi-family housing, the design and building community faces the challenge of creating products that will appeal to a very diverse market. Projections for the increases in non-traditional households that range from young people just starting their careers to aging baby boomers are staggering.

While large multi-family projects will certainly continue to be built, there appears to be an opportunity to create smaller, well-designed duplexes and four-plexes that gracefully integrate with existing single-family homes.

The key components for successful placement in either an older neighborhood or a new planned development are careful consideration of scale and materials that allow for the building to blend with the other homes. These multi-family designs must be respectful of the context where they are being built.

Actually, the mixture of multifamily and single-family homes in the same area is not a new concept. Many older neighborhoods successfully combined such diverse housing options by simply utilizing consistent exterior materials, along with appropriate scale and proportion.

Our House Review design team has responded this month with a variety of solutions, ranging from an infill project that resurrects this traditional idea of mixing housing types to thoughtful new designs that have carefully addressed the critical need for privacy with attached homes.

For more on these plans and to view past House Review themes, visit www. HousingZone.com/HouseReview.



#### DESIGNER'S ESSAY

Multi-family designs always present challenges regarding privacy, parking, and creating an overall exterior design that maintains proper scale and proportion. Privacy considerations involve both perceived and actual elements.

This duplex concept offers a great deal of privacy with common walls only at the garage and the kitchen/bath. The front doors to each villa are strategically located on opposite sides of the building to ensure that there is absolutely no view from one entrance to the other. Additionally, the front door locations provide for an overall exterior design that appears to be one large single-family home.

The side and rear yard areas offer secluded outdoor living spaces for each villa that rival many single-family homes. While separated by a wall, the single garages for each villa appear from the exterior to be one large garage. In fact, each of the exterior elevations has been thoughtfully created to allow for complete flexibility when placing the structure on a particular site.

Inside, both villas offer first-level master bedrooms for maximum appeal to all market segments. Villa A, with two bedrooms and a loft on the second floor, offers plenty of flexible space for growing families or those with visiting children and grandchildren. Villa B, with both bedrooms on the first floor, becomes ideal for either a retired couple or two individuals sharing the home. Both villas utilize an open-concept kitchen/ living/dining area. Also, the logical traffic flow through each layout allows for functional and spacious placement of furniture.

The stone and cement fiber siding, along with a metal roof, offer great curb appeal for many markets. However, substituting other siding and roofing materials can easily address specific tastes in each unique market. **ENTRANCE TO VILLA B** 



#### DESIGNER

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### PLAN SIZE

VILLA A First floor: 785 sf Second floor: 485 sf VILLA B Total living: 981 sf Overall width: 66 feet, 7 inches Overall depth: 48 feet, 10 inches



PLAN NO. 56562

#### SINGLE-FAMILY ATTACHED HOUSING

#### THE HAMPTON

#### ARCHITECT

Dominick Tringali Architects jamieq@dtarchitects.com 248.335.8888 www.dtarchitects.com/probuilder

#### BUILDER

Arteva Homes www.arteva.com

#### PLAN SIZE UNIT 1:

First floor: 1,556 sf Lower level: 753 sf 2 bedrooms, 3 bathrooms **UNIT 2:** First floor: 1,604 sf Second floor: 667 sf Third floor: 896 sf 3 bedrooms, 4 bathrooms Overall width: 69 feet, 3 inches Overall depth: 61 feet, 5 inches

#### **ARCHITECT'S ESSAY**

The Hampton is a unique multi-family plan that emphasizes luxury living in a smaller square footage. Although this is a ranch plan, three floors were incorporated to maximize the use of space. On the main floor, each unit features interactive spaces such as integrated kitchen/dining/family room areas and large master bedrooms with walk-in-closets.

A flex room offers a convenient space for an office, homework room, or library. Each unit offers a deck located off the family room, which extends the living and entertainment space to the outdoors.

The lower level offers an open bar and media room/billiards space for entertaining guests. This area walks out to a lower-level patio, which is shaded by the deck on the main floor. Each lower level also features a second bedroom with a private bathroom and walk-in closet.

A unique second-floor space was designed into the plan as well, featuring a loft sitting area and a third bedroom with its own bathroom.



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#### SINGLE-FAMILY ATTACHED HOUSING

#### THE LAUSANNE

#### ARCHITECT

Rick Garza, principal RPGA Design Group Inc. 888.879.7742 rickgarza@rpgaarchitects.com www.rpgaarchitects.com

#### PLAN SIZE

UNITS 1 AND 3: 1,030 sf UNITS 2 AND 4: 1,060 sf Porches: 312 SF 2 bedrooms, 1 bathroom

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#### ARCHITECT'S ESSAY

A great idea introduced in the early 20th century was integrating multi-family buildings into single-family neighborhoods. This was done for a number of reasons — from affordability to simply providing an alternative housing source in an area where many people wanted to live.

The thought of mixing housing types might sound slightly inappropriate. However, with a thoughtful, skillfully designed solution, this approach can be hugely successful while preserving the character, charm, and integrity of a single-family neighborhood. It takes a thorough design solution to pull it off.

The solution is to take a normal single-family lot of 50 feet wide by 150 feet deep and design a building that houses up to four rental homes in a single building, while designing the exterior aesthetic to appear as a single-family home. While many neighborhoods may prohibit this type of use, this can also be applied to multi-family design as a concept for creating a neighborhood quality in multi-family structures. Another benefit of the four-plex is the fact that it can yield more than 22 units to the acre.

One such design is the Lausanne. This project is designed with the character and charm of an older neighborhood. The exterior detailing was carefully designed to blend in with the older neighborhood and have the appearance of a singlefamily home. By utilizing an entry stair hall that accesses all four rental homes, we were able to design a single main entrance that, along with the protruding porch balconies and sensitive landscaping, offers a sense of harmony to the four-unit rental building in a single-family neighborhood.



The rental homes are designed with units over 1,000 square feet. And while these are rental homes, the feel and character of the interior is consistent with something you generally find only in single-family homes. Each unit has a living room, dining room, kitchen, utility room, two bedrooms, bathroom, and a rear stair hall leading to the detached rear garage. Windows placed carefully in each room add a quality of light.

All in all, this type of alternative housing design can be charming and full of character while providing a solution that appeals to a larger audience. Each building can have a unique design aesthetic and maintain a neighborhood pattern and rhythm that is quite pleasing.