CONSTRUCTION DATA

2000 INTERNATIONAL RESIDENTIAL CODE

APPENDIX B

GENERAL INFORMATION:

NAME OF PROJECT: LAKE SHORE TOWN HOMES

ADDRESS: TBDA DEV, ROCK HILL, SOUTH CAROLINA

PROPOSED USE: RESIDENTIAL

OWNER / CONTACT PERSON: RICHARD JOHNNETT, DRHORTON COMPANY 704.377.2008

DESIGNER OF RECORD:

	NAME	/ LICENSE #	TELEPHONE NO.
ARCHITECTURAL	JOHN R. URBAN, RA	/ 01054	(704) 841-1888
ELECTRICAL	NICHOLAS E. VENTOS	/ 33183	(704) 527-9878
PLUMBING	DINO PAPPAS	/ 23725	(704) 527-9878
MECHANICAL	DINO PAPPAS	/ 23725	(704) 527-9878
STRUCTURAL		/	( )
FIRE ALARM		/	( )
CIVIL	ISAACS GROUP	/ 031037	(704) 527-3440

BUILDING DATA:

OCCUPANCY: ASSEMBLY BUSINESS EDUCATIONAL MERCANTILE HAZARDOUS FACTORY-INDUSTRIAL [RESIDENTIAL] STORAGE

MIXED OCCUPANCY? YES / [NO] SEPARATION: – HR.

CONSTRUCTION TYPE: I-A I-B II-A II-B III-A III-B IV V-A [V-B]

MIXED) CONSTRUCTION YES / [NO] TYPE –

SPRINKLERED? YES / [NO] (13 13R 13D –)

FIRE DISTRICT? YES / [NO]

BUILDING HEIGHTS: VARY NUMBER OF STORIES: SEE ELEVATIONS A2.1, A2.2, A2.3.

MEZZANINE? YES / [NO]

HIGH RISE? YES / [NO]

GROSS BUILDING AREA:

TOWN HOME UNITS:

MID UNIT B:

Square Footage	-B-
FIRST FLOOR =	1,286 sq.ft.
SECOND FLOOR =	1,361 sq.ft.
THIRD FLOOR =	311 sq.ft.
TOTAL HEATED =	2,798 sq.ft.
GARAGE =	445 sq.ft.
TOTAL =	3,243 sq.ft.

END UNIT C:

Square Footage	-C-
FIRST FLOOR =	1,782 sq.ft.
SECOND FLOOR =	954 sq.ft.
TOTAL HEATED =	2,345 sq.ft.
GARAGE =	396 sq.ft.
TOTAL =	2,741 sq.ft.

AREA INCREASE? YES / [NO] YES, CODE REFERENCE:

IF YES, CALCULATIONS:

FIRE RESISTANCE RATINGS:

	REQUIRED HOURLY RATING	DETAIL # & SHEET # OF RATED	% WALL OPENING	UL/FM # FOR RATED ASSEMBLIES
PARTY / FIREWALLS	2 HR. Rated Wall	Title Sheet	–	UL-U336
EXTERIOR BEARING WALLS:				
NORTH	NC	–	–	N/A
EAST	NC	–	–	N/A
WEST	NC	–	–	N/A
SOUTH	NC	–	–	N/A
EXTERIOR NON-BEARING WALLS:				
NORTH	0	–	–	N/A
EAST	0	–	–	N/A
WEST	0	–	–	N/A
SOUTH	0	–	–	N/A

INTERIOR WALLS:

	REQUIRED HOURLY RATING	DETAIL # & SHEET # OF RATED	UL PENETRATIONS TEST	UL/FM # FOR RATED ASSEMBLIES
BEARING	NC	–	–	N/A
NON-BEARING	NC	–	–	N/A
TENANT SEPARATION	N/A	–	–	N/A
CEILING-FLOORS ASSEMBLY:	NC	–	–	N/A
BEAMS:	0	–	–	N/A
COLUMNS:	0	–	–	N/A
CEILING-ROOF ASSEMBLY:	NC	–	–	N/A
VERTICAL SHAFTS:	0	–	–	N/A
CHASES -P.L. M.L. E.:	N/A	–	–	N/A
MIXED OCCUPANCY SEPARATION	N/A	–	–	N/A
TENANT SEPARATION	N/A	–	–	N/A

LIFE SAFETY SYSTEM:

EMERGENCY LIGHTING AND EXIT SIGNS YES / [NO] (N/A)

FIRE ALARM AND SMOKE DETECTION SYSTEMS [YES] / NO (SMOKE DETECTORS)

PANIC HARDWARE YES / [NO] (N/A)

EXIT REQUIREMENTS:

DEAD END LIMIT-MAXIMUM CONDITION – N/A

TRAVEL DISTANCE TO EXIT-MAXIMUM CONDITION – N/A

NUMBER OF EXITS:

TOTAL NUMBER OF DOORS PROVIDED 2.

TOTAL NUMBER OF DOORS REQUIRED 1.

GENERAL NOTES

1. Do not scale drawings. If dimensions are in question, obtain clarification from architect.
2. Contractor is to verify all existing conditions before beginning construction.
3. Use moisture resistant G.W.B. in toilets and at all wet areas.
4. Provide blocking as required for millwork, toilet accessories, and misc. hardware.
5. Provide fire treated wood blocking when required by code.
6. General Contractor shall install all work according to local, state, and federal codes.
7. General Contractor shall verify all utility locations before beginning construction.

STRUCTURAL DESIGN:

Design Loads:

Importance Factors:
Wind (Iw) 1.0
Snow (Is) 1.0
Seismic (Ie) 1.0

Live Loads:
Roof 20 psf
Non-rms 0/0 psf
Floor 40 psf

Snow Load: 10 psf

Wind Load:
Basic Wind Speed 98 mph (ASCE-7-98)
Exposure Category B UNIT A UNIT B UNIT C
Wind Base Shears (for MBRTS) Vx= 7.2 8.5 6.0
Vy= 7.2 8.5 6.0

Seismic Design Category A:

Compliance with Section 1616.4 only? [X] No [ ] Yes

Seismic Design Category B/C&D:

Provide the following Seismic Design Parameters:

Seismic Use Group
Spectral Response Acceleration: Sms .582 Sg Sm1 .330 Sg
Site Classification D
Basic Structural System (check one):
X Bearing Wall ___ Dual w/Special Moment Frame
___ Building Frame ___ Dual w/Intermediate R/C or Special Steel
___ Moment Frame ___ Inverted Pendulum
Seismic Base Shear Vx= Vy= UNIT A 4.6
Analysis Procedure: ___ Simplified ___ X ___ Equivalent Lateral Force
Architectural, Mechanical, Components anchored?

Lateral Design Control: Earthquake ___ Wind ___ X

Soil Bearing Capacities:
Field Test (provide copy of test report)
Presumptive Bearing Capacity 3000
Pile size, type and capacity

THERMAL ENVELOPE: – B –

METHOD OF COMPLIANCE: CHPT. 39

[Prescriptive] Performance Energy Cost Budget

ROOF/CEILING ASSEMBLY (each assembly)

Description of assembly: wood truss w/ 1/2" O.S.B. and shingle roof w/ r-30 batt
U- value of total assembly .0318
R- value of insulation 30
Skylights in each assembly: n/a
U- value of skylight n/a
total square footage of skylights in each assembly: n/a

EXTERIOR WALLS (each assembly)

Description of assembly: Siding over wood framing
U- value of total assembly .064
R- value of insulation 13
Openings (windows or doors w/ glazing): vinyl windows R-1.89
U- value of assembly .56
shading coefficient –
projection factor –
low e required, if applicable n/a
Door R- values: min. 1.66 unglazed 1.78 glazed
Ceiling/Floor: assemblies common to separate dwelling units R-13

WALLS ADJACENT TO UNCONDITIONED SPACE (each assembly)

Description of assembly: n/a
U- value of total assembly n/a
R- value of insulation n/a
Openings (windows or doors w/ glazing): –
U- value of assembly –
low e required, if applicable –
Door R- values –

WALLS BELOW GRADE (each assembly)

Description of assembly: n/a
U- value of total assembly –
R- value of insulation –

FLOORS OVER UNCONDITIONED SPACE (each assembly)

Description of assembly: n/a
U- value of total assembly: n/a
R- value of insulation: n/a

FLOORS SLAB ON GRADE

Description of assembly: 4" slab on grade
U- value of total assembly .172
R- value of insulation R-0 per zone 7 Table 502-2000 IRC
Horizontal/vertical requirement n/a
Slab heated n/a

THERMAL ENVELOPE: – C –

METHOD OF COMPLIANCE: CHPT. 39

[Prescriptive] Performance Energy Cost Budget

ROOF/CEILING ASSEMBLY (each assembly)

Description of assembly: wood truss w/ 1/2" O.S.B. and shingle roof w/ r-30 batt
U- value of total assembly .0318
R- value of insulation 30
Skylights in each assembly: n/a
U- value of skylight n/a
total square footage of skylights in each assembly: n/a

EXTERIOR WALLS (each assembly)

Description of assembly: Siding over wood framing
U- value of total assembly .064
R- value of insulation 13
Openings (windows or doors w/ glazing): vinyl windows R-1.89
U- value of assembly .56
shading coefficient –
projection factor –
low e required, if applicable n/a
Door R- values: min. 1.66 unglazed 1.78 glazed
Ceiling/Floor: assemblies common to separate dwelling units R-13

WALLS ADJACENT TO UNCONDITIONED SPACE (each assembly)

Description of assembly: n/a
U- value of total assembly n/a
R- value of insulation n/a
Openings (windows or doors w/ glazing): –
U- value of assembly –
low e required, if applicable –
Door R- value –

WALLS BELOW GRADE (each assembly)

Description of assembly: n/a
U- value of total assembly –
R- value of insulation –

FLOORS OVER UNCONDITIONED SPACE (each assembly)

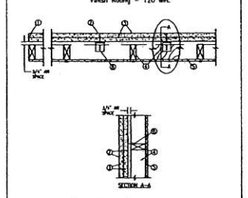
Description of assembly: n/a
U- value of total assembly: n/a
R- value of insulation: n/a

FLOORS SLAB ON GRADE

Description of assembly: 4" slab on grade
U- value of total assembly .172
R- value of insulation R-0 per zone 7 Table 502-2000 IRC
Horizontal/vertical requirement n/a
Slab heated n/a

DESIGN No. U336

Exposed to fire from separation Wall side only
Non-Bearing Wall Rating – 2 HR.
Finish Rating – 120 Min.



SEPARATION WALL: (Max. Height – 44 ft)

1. Floor, intermediate or Top Rail– 2 in. min channel shaped with 1 in. long legs formed from No. 25 MSG galv steel, secured with suitable fasteners spaced 24 in. O.C.
2. Metal Studs– Steel members formed from No. 25 MSG galv steel having "V"-shaped flanges spaced 24 in. OC. overall depth 2 in. and flange width 1–3/8 in.
3. Wallboard, Gypsum*– two layers of 1 in. thick gypsum wallboard liner panels, supplied in nom. 24 in. widths. Vertical edges of panels trition fitted into "V"-shaped studs.

UNITED STATES GYPSUM CO. – Type SLX

PROTECTION WALL: (Bearing or Non-Bearing Wall)

4. Wood Studs– Nom 2 by 4 in. min spacing 24 in OC. Studs cross braced at mid-height where necessary for clip attachment. Min 3/4 in. separation between wood framing and fire separation wall.
5. Wallboard, Gypsum– Gunnfast or Uncleasefast – Min 1/2 in. thick, 4 ft wide, applied either horizontally or vertically. Wallboard attached to studs with 1–1/4 in. long steel drywall nails spaced 8 in. OC. Vertical joints backed over studs. (Optional) joints covered with paper tape and joint compound. Wall heads covered with joint compound.
6. Attachment Clips– Aluminum angle, 0.063 in. thick, 2 in. wide with 2 in. and 2–1/4 in. legs. Clips secured with Type S screws 3/8 in. long to "V" studs and with Type W screws 1–1/4 in. long to wood framing through holes provided in clip.

6A. Clip placement (Item 6) for separation walls up to 33 ft High. Space clips at one of 90 ft OC vertically between wood framing and "V" studs.

6B. Clip placement (Item 6) for separation walls up to 44 ft High. Space clips as described in Item 6 for upper 24 ft.; Remaining wall area below required clips spaced a max of 5 ft OC vertically between wood framing and "V" studs.

*Bearing Per UL Classification Marking

UL LISTINGS - U336

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REGISTERED ARCHITECTS

LAKE SHORE TOWN HOMES

TBDA DEV, SC

STATE OF SOUTH CAROLINA
JOHN R. URBAN
Matthews, NC
5409
REGISTERED ARCHITECT

DATE ORIGIN:
5 JUNE 2006

PROJECT NO.:
2530

ISSUED FOR:
PERMIT & CONSTRUCTION
5 JUNE 2006

CS.2