Village at Riverbend Balcony Deck Rebuild Specifications

The Village at Riverbend Condominium Association balcony cantilevered decks are being replaced with ledger board and support post construction due to significant water penetration and structural rot caused by the original cantilever design. This document outlines the specific construction details as approved by the Board of Directors that all Contractors will use when removing and rebuilding the balcony decks.

The existing balcony decks are to be safely removed from the building structure and the following methods used to inspect the building structure for water damage, repair of structural defects and rebuilding of a new balcony deck with concrete piers, posts and ledger board. All structural lumber for the balcony decks shall be pressure treated lumber:

1. The existing railings, floor boards and floor joists will be removed with floor joists initially being cut off near the building wall. This situation now creates a safety issue if a person were to exit the second floor balcony door. Therefore, sufficient boarding will be temporarily installed across the doorway to prevent an accidental fall. The VRB Management Company shall notify the Unit Owner before the balcony is to be removed of the removal and recommend while under construction that the balcony door remain locked and obstruct exiting from the interior to prevent an accidental fall;
2. Wall siding, trim and sheathing above, surrounding and below the balcony floor joists and down to the top of the main floor door shall be removed to allow a full evaluation of the

structure condition. Wherever signs of water penetration and structure wood rot are observed further investigation of the interior building structural envelope shall be completed by removing wall sheathing, rim/band joists and wall insulation as needed/required. The balcony door pan flashing shall be trimmed as needed. The existing
cap flashing over the 1st floor door shall be removed;
3. The existing cantilevered floor joists will be trimmed so as to be flush with the stud wall
plates and rim/band joists. If the floor joists have more than surface water damage the
adjacent rim/band joist shall be removed for further evaluation. If the rot is more than
superficial a new floor joist shall be sistered to the old joist using GRK Rugged Structural
Screws 5/16"x3 ½" with the new joist extending into the interior a minimum of 3' in length or more depending on the degree of rot. If wall studs, wall header beams or top
plates are damaged from water rot appropriate repairs are to be made. If the water damage is extensive and extends to the second floor subfloor/substrate removal of the
balcony door may be required to make necessary repairs to the subfloor and floor joists,
this situation requires the Contractor to consult with the VRB Management Company for
BOD approval of the work. ***Note: Photographs showing the structural damage and subsequent repairs are to be taken by the Contractor for verification***;
4. If rim/band joists were removed new rim/band joists shall be installed and fastened to the
floor joists and wall top plates using structural screws. Care should be taken to securely
attach new rim/band joist boards and ensure the existing boards are secure because some

of the ledger board lag screws will be fastened to these cripple rim/band joist boards;
5. When wall sheathing has been removed it is to be replaced with ZIPsystem sheathing and
all seams taped with ZIPsystem flashing tape. If the existing Tyvek wall covering was
removed, but not sheathing, new Tyvek material shall be installed with all seams taped
with Tyvek or Zip tape material;
6. New aluminum cap flashing shall be installed on to the 1st floor door top trim and then
sealed to the wall with Grace or Zip type flashing tape;
7. As an additional layer of water protection all exposed sheathing will have Grace Select or
equivalent fabric installed prior to the ledger board and finish materials being installed.
The membrane type fabric will extend from under the 2nd floor door threshold to the top
of the 1st floor door trim overlapping onto the trim and taped as needed;
8. The balcony deck piers will be constructed using 12" Sonotubes 48" deep from the top of
the concrete patio slab and filled with structural concrete with a minimum 5,000 psi rating and finished flush with the patio slab. ***Note: The Contractor MUST take at least 1 photograph of each Sonotube verifying the size and depth with a measuring device inserted prior to filling with concrete so the Building Inspector and BOD can confirm the piers are Code Compliant***;
9. Two (2) 6"x6" support posts will be used with the deck beam bearing directly on top of
the posts. The deck beam shall be two (2) 2"x10" boards joined together using GRK structural screws, supported and fastened to the top of the support posts with metal brackets and structural screws. The support posts must be connected to the concrete piers

with Simpson Strong-Tie 6”x6” Zmax Bases and anchored to the pier with a ½”x6” threaded bolt embedded in an epoxy compound or with a ½” J-Bolt cast/embedded into
the concrete as it is poured. (See photos for connectors style);
10. The balcony deck ledger board shall be a 2”x10” of appropriate length for the width of
the deck and attached to the building rim/band joist to allow for a 4 ½” finished step down from the balcony door threshold to the finished deck floor. The ledger board shall
be fastened to the rim/band joist using code compliant ledger screws with a code compliant and best practice screw pattern of one screw in between each new deck joist
evenly spaced 15”+- with a staggered up and down pattern to prevent the screws from
being on the same board grain, which may result in cracking of the ledger board. Lag screw placement must be a code compliant pattern with no screws fastened to the ledger
board or rim/band joists within 2” from edges, 2” from the top and ¾” from the bottom of
any board. A screw pattern for the ledger board should be planned out prior to covering
the framing structure with sheathing so proper placement of the lag screws do not fall
within the above stated areas. Due to the ledger board being placed 5 ½” +- down from
the top of the rim/band joists and old floor joists, planning of the lag screw pattern is
important, and attachment to the wall top plate may be required depending on the structure design of the building. A photo of the structure before sheathing may be of help
to verify proper lag screw planning and installation. The prefered brand of ledger screws

are GRK Rugged Structural Screws 5/16”x5 ⅛” or Code Compliant equivalent;
11. The ledger board will be properly flashed using ***copper*** cap flashing and Zip flashing
tape. (Note: Aluminum and metal flashing materials have been resulting in premature
decay due to chemical reactions with the pressured treated lumber and aluminum or metal
flashing, therefore copper will be used, which has been shown to withstand adverse chemical reactions);
12. The deck floor joists shall be 2”x10” and as long as required to span from the ledger
board to the outside beam, placed 16” on center and attached to the ledger board and
beam using code compliant joist hangers and nails;
13. The deck flooring shall be 5/4”x6” boards of appropriate length and fastened to the floor
joists using 2 ½” exterior grade decking screws;
14. The deck railings shall be mounted to the deck floor structure using 4”x4” posts with a
height of 42” above the deck floor. There shall be 2 corner posts, a post in the middle of
the railing span and a post at each wall connection (see the attached photos for the style
differences, some using 4 or 5 posts). The railing support posts shall be fastened to the
deck floor joists by a minimum of 2 GRK Rugged Structural Screws, blocking to the
floor joists if needed for lateral stability, and deck flooring appropriately wrapped to the
posts for lateral stability. The top structural rails shall be 2”x6” boards fastened to the
posts with GRK screws. The railing balusters shall be placed evenly between the posts

with less than a 4” space between the balusters and fastened to the top rail and deck beam
using deck screws;
15. Finish Trim Boards and Siding shall be installed as needed. Where cap flashing is needed
but not attached to pressure treated lumber aluminum cap flashing shall be installed and
seams taped prior to installing siding. The trim board between the bottom of the balcony
door threshold and the finished deck flooring shall be Azek type material installed with a
bead of caulk applied between the bottom of the door threshold and the top of the trim
board to prevent water penetration.

Note: See the attached photographs for visual reference and guidance. Building 16 Units 56 & 57
balcony deck structures and railings are to be the model for all future deck construction unless
otherwise modified by the BOD.

Note: During demolition and rebuilding of the decks all construction debris should be placed
safely onsite or into a prearranged dumpster and the area will be left in a clean and safe condition
at the end of each work day and at the completion of the project. The Contractor should
coordinate debris removal with the VRB Management Company.