



Knowledge | Experience | Solutions

BUILDING EXTERIOR SOLUTIONS

A Terracon COMPANY

6975 Portwest Dr., Suite 100, Houston, Texas 77024

P: 713.467.9840 F: 713.467.9845

www.besgrp.com

Field Report 1

Project Name: Rosewood Courts CPHC Consulting **BES Project Number:** FW186009
Owner: Housing Authority of the City of Austin **BES Project Manager:** Keith Simon
Contractor:
A/E:

Reported By: Keith Simon **Reported On:** 02/26/2018

Weather: Overcast, approx. 45 dF

Work In Progress: none

Performed By: Keith Simon

Performed On: 02/22/2018

Present at Site:

Distribution:

Keith Simon, BES

ksimon@besgrp.com, Keith Simon

Nick Wakem, Housing Authority of the City of Austin

jposenecker@besgrp.com, John Posenecker

nicholasw@hacanet.org, Nick Wakem

General Report Comments: BES was on-site on February 22, 2018 and walked the Rosewood Courts property with Housing Authority of the City of Austin (HACA) representative, Nick Wakem. BES and HACA entered unit 103 to make observations from the interior of that unit. Rosewood Courts is a 1939-1941 affordable housing complex with 26 total structures and approximately 125 total living units. The structure's primary enclosure systems include load-bearing masonry walls, single-pane aluminum windows, low-slope concrete roof deck with steep-slope asphalt-shingle roofing, and concrete floor slabs. The units do not currently have insulation in the walls and therefore do not meet current energy code requirements. Nick Wakem requested BES opine on the feasibility of renovating the existing structures to achieve PHIUS (Passive House Institute US) certification as well as meet historic preservation requirements. PHIUS certification typically requires continuous exterior insulation (outboard of the masonry walls), a robust continuous air barrier, new high-performance doors and windows, and new mechanical systems - all of which could dramatically alter the exterior aesthetics. Based on BES's discussion with Nick Wakem regarding the historic preservation requirements, PHIUS certification may be in direct conflict with the historic preservation requirements. While it may be technically possible to meet PHIUS certification requirements by adding insulation to the interior of the existing walls, BES does not recommend that approach for the following reasons:

1. Interior spaces would be significantly reduced in size.
2. A hygrothermal analysis would be required to ensure that installation of interior insulation would not move the average dew point so far to the interior that durability issues arise such as mold, rot, mildew, and decay.
3. The energy-efficiency, durability, and thermal comfort of locating insulation outboard of the masonry walls would be significantly more beneficial and cost effective than locating insulation interior of the masonry walls.
4. Interior insulation would create thermal bridge challenges at the wall to ceiling transition and the wall to flooring transition.



Item 1.1

System Observed: **Trade/Subcontractor:**

Discussion: *Overall Exterior Photos*



Conclusions:

Action Items: Responsible Party:



Item 1.2

System Observed: _____ **Trade/Subcontractor:** _____

Discussion: *Historic Designation Plaque*



Conclusions: _____

Action Items: _____ **Responsible Party:** _____



Item 1.3

System Observed: **Trade/Subcontractor:**



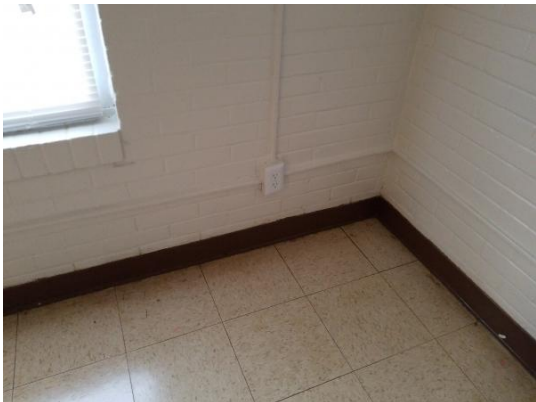

Discussion: *Unit 103*



Conclusions:

Action Items: **Responsible Party:**



Item 1.4	
System Observed:	Trade/Subcontractor:
Discussion: Unit 103	
	
Sealant Visible at Mullion Window Unit	Lintel Visible from Interior at Window Head
	
Exposed Conduit on Masonry Walls	Condensation Visible on Window Glass and Frame
Conclusions:	
Action Items:	Responsible Party:

General Notes:

BES's observations are performed on a limited, periodic basis of the relevant installations visible at the time of our site visits. The purpose of our observations is to determine if the relevant installations are in general conformance with the project documents and to review field conditions that may not be reflected in the construction documents. Our recommendations apply to the observations made and noted within this report. If modifications are made to resolve an issue addressed in this report, then all like conditions should be inspected and modified accordingly by the parties responsible for the work so that they comply with the project documents. For field conditions not addressed by the project documents, the appropriate paperwork



should be submitted to the Architect/Engineer so that the resolution is recorded and made a part of the contract documents.

Our observations are not intended as the sole means of quality control for a project. The general contractor and subcontractors should supervise and provide their own quality assurance and field quality control. Any other conditions that do not comply with the project documents should be modified as required so that they meet the specified requirements.

The scope of our observations is defined within our client contract and is only for the installations dictated within that contract. Work that is concealed at the time of our site visit cannot be observed. Measures should be taken by the installer to properly document modifications to previously deficient work for the Architect's/Engineer's approval if not visible during site observations. Furthermore, BES does not have control over the work performed and cannot stop work; however, we will notify our client and the general contractor of relevant work observed by BES that does not appear to comply with the construction documents.

End of Report