# STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

DEPARTMENT OF BUSINESS AND	)		
PROFESSIONAL REGULATION, FLORIDA	)		
ENGINEERS MANAGEMENT CORPORATION,	)		
	)		
Petitioner,	)		
	)		
VS.	)	Case No.	99-2817
	)		
WILLIAM J. PAYNE, P.E.,	)		
	)		
Respondent.	)		
	)		

#### RECOMMENDED ORDER

A formal hearing in this matter was held before the Division of Administrative Hearings by Daniel M. Kilbride, Administrative Law Judge, on November 4, 1999, in Tallahassee, Florida, and in Orlando, Florida, by teleconference.

### APPEARANCES

For Petitioner:	, 1
	Florida Board of Professional Engineers
	1208 Hays Street
	Tallahassee, Florida 32301-0750

For Respondent: William J. Payne, P. E. 7702 Indian Ridge Trial, North Kissimmee, Florida 34747

### STATEMENT OF THE ISSUES

Whether Respondent engaged in negligence in the practice of engineering based on the structural engineering contained on a set of permit drawings, in violation of Section 471.033(1)(g), Florida Statutes.

## PRELIMINARY STATEMENT

On May 27, 1999, Petitioner filed an Administrative Complaint charging Respondent with a three-count violation of Chapter 471, Florida Statutes. Respondent denied the allegations and requested a formal hearing on June 24, 1999. On the same date, this matter was referred to the Division of Administrative Hearings. This matter was set for hearing and discovery ensued. On September 21, 1999, Petitioner filed a Motion to Amend Administrative Complaint. Said motion was granted by Order, dated September 27, 1999, and this matter proceeded to hearing as scheduled.

At hearing, Respondent elected to proceed <u>pro</u> <u>se</u>. Petitioner called three witnesses and offered six exhibits, five of which were admitted in evidence. Respondent testified in his own behalf and offered three exhibits, none of which were admitted in evidence. Respondent's Exhibits B and C were demonstrative only and were not retained.

The Transcript of the hearing was filed on December 22, 1999. The parties were given ten days after the filing of the Transcript in which to file proposed findings of fact and conclusions of law. On December 23, 1999, Counsel for Petitioner filed a motion for extension of time to file proposed orders. Said motion was granted and the parties were given until January 12, 2000, to file their proposals. Petitioner filed its Proposed Recommended Order on January 10, 2000. Respondent has

not filed a proposed recommended order as of the filing of this Recommended Order.

## FINDINGS OF FACT

 Petitioner is the state agency charged with regulating the practice of engineering pursuant to Section 20.165, Chapter 455 and Chapter 471, Florida Statutes.

2. Respondent is, and has been at all times material hereto, a licensed engineer in the State of Florida, having been issued license number PE 51230.

3. In December 1998, Respondent was the engineer of record in the construction of a project hereinafter referred to as the Berlitz Language Center in Orange County, Florida.

4. On or about December 9, 1998, Respondent signed and sealed a set of permit drawings for the Berlitz Language Center.

5. Respondent then submitted the drawings to the Orange County Building Department for permitting.

6. Rami Chami, a structural plans examiner with the County, reviewed the first submittal. Chami has a background in structural engineering. He is also a state-certified plans examiner, a state-certified building inspector and a masonry specialist.

7. The proposed Berlitz Language Center is a two-story building constructed of insulated panels called AFM R-Control Structural Building Panels. The panels consist of a layer of foam-type material between two layers of plywood. The panels

were used to provide a structural system that included the exterior walls, the exterior partitions, an elevated second floor, and a roof system.

8. Along with the plans Respondent submitted a compliance report that outlined use limitations placed on the panels. The manufacturer of the panels had run extensive load tests on the panels and as a result of these tests had recommended loads and spans.

9. Chami became concerned that the panels had not been tested for the loading conditions placed upon them by Respondent's design. He contacted the panel manufacturer and sent them a copy of the Respondent's plans.

10. By facsimile dated January 11, 1999, the AFM Corporation recommended against using the panels as shown on the drawings because the panels had not been tested using that method of construction.

11. The Orange County Building Department then hired an independent structural engineer, Ted Holz, P.E., to review the drawings and to provide comments to the Department.

12. Ted Holz, P.E., is a licensed structural engineer. He also holds a building contractor's license and is a structural masonry inspector.

13. In the opinion of Mr. Holz, Respondent had not performed an appropriate wind analysis. He found the plans rife with questions, irregularities, and conflicts. He also confirmed

that the panels were being used in ways that would exceed the manufacturer's published data.

14. In his opinion, the structure failed to comply with the local building code in regard to wind loads and live loads.

15. Upon receipt of Holz' report, Chami again contacted the AFM Corporation and provided them with sketches of the proposed structure. By facsimile dated February 2, 1999, the AFM Corporation again recommended against the method of construction used by Respondent.

16. Chami rejected the plans because Respondent's intended use of the panels in the Berlitz project was not acceptable.

17. James O. Power, P.E., is a structural engineer who has been licensed in the State of Florida since 1947. He has over 47 years of structural engineering experience. Since 1980, he has been a consultant to the Department of Business and Professional Regulation in various professions including engineering, architecture, and contractors. Mr. Power was accepted as an expert in structural engineering.

18. The manufacturer of the panels has performed extensive load tests on the panels and as a result of these tests has recommended load and spans. However, the conditions of use must match the test conditions.

19. The most significant limitation on the test report is that the panels must be installed in conformance with the manufacturer's recommendations.

20. In a number of cases, as shown on the drawings, the span and the load exceed those in the manufacturer's drawings as well as those in the Southern Building Code Congress International (SBCCI) test report.

21. There are two additional restrictive requirements. The first states that panels should not exceed ten feet in height. The majority of the panels on the Respondent's drawings are 12 feet high.

22. A second restriction requires a specially engineered header support beam to be provided for all openings exceeding four feet in width. There was no detail of any header or support for the 6-foot, 8-inch opening in the front door on Respondent's drawings.

23. Respondent's use of the panels was contrary to the manufacturer's recommendations and did not comport with the limitations set forth in SBCCI Report No. 9251.

24. Respondent's drawings are deficient in that they are incomplete, ambiguous, and inconsistent.

25. On sheet EB01, the space under the Rear Stairway is shown to be enclosed. This is contrary to what is shown on sheets EB03 and EB23.

26. Sheet EB02 shows what appears to be a vertical support located below the interface of the Left Stair with the upper landing. This is contrary to what is shown on EB23.

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27. The Floor Panel layout on sheet EB22 fails to provide for the opening in the second floor necessitated by the Rear Stairway.

28. The Roof Panel layout on sheet EB22 fails to address the extension of the roof over the left stairway as shown on EB11.

29. The detail of the floor spline found at EB11 calls for an AFM Wood I-Beam but this is not permitted by Table No. 3A of the SBCCI Report No. 9251 for a 5 1/2-inch core. Furthermore, this detail is in conflict with the note on EB27 which refers to Design Chart No. 3. Design Chart No. 3 deals with dimensional lumber beam splines rather than I-beam splines.

30. Wall Panel No. 3, found on sheet EB18, is inconsistent with what is found on EB03. No support is indicated for Wall Unit No. 13 or for the left stairway.

31. No details were provided regarding the construction of the rear stairway or the members supporting it.

32. The exterior wall of the left stairway extends upward from 12 feet, 8 inches to 24 feet without transverse support at the end joints and without any support to resist wind loads except for what might be provided by the unspecified stair construction.

33. The location of supporting walls found on EB03 is such that the span of the second floor panels, a maximum of

approximately 27 feet, greatly exceeds the 12 feet permitted by Design Chart No. 3 in SBCCI Report No. 9251.

34. The location of supporting walls found on EB07 is such that the span of the roof panels, a maximum of approximately 52 feet greatly exceeds the 20 feet permitted by Design Chart No. 3 in SBCCI Report No. 9251.

35. On sheet EB07, connections between roof and floor panels, which are necessary to provide transverse resistance to wind loads, have not been specified for the front and rear walls.

36. On sheets EB18, EB19, EB20, and EB21, wall openings and panel widths have not been coordinated to avoid the situation of a wall opening extending through a vertical joint into the adjoining panel.

37. Sheets EB18, EB19, EB20 and EB21 fail to specify details of headers and supporting posts.

38. Wall panels No. 2, No. 3, and No. 4 lack transverse support at panel ends and do not match the test load conditions on which Load Design Chart No. 2 in the SBCCI Report No. 9251 is based.

39. Wall Panel No. 5 encroaches on the opening in the second floor necessitated by the rear stairway.

40. At the left side of the rear wall, there is a 4-foot vertical gap between the gap between the top of Wall Panel No. 6, shown on EB19, and the bottom of Wall Panel No. 19, shown on EB21.

41. No support is indicated for Wall Unit No. 30 in Wall Panel No. 9.

42. No support is indicated for Wall Unit No. 31 in Wall Unit No. 13.

43. The designation of Wall Unit No. 31 in Wall Panel No. 30 is the same as hat in Wall Panel No. 13 but the dimensions are different.

44. No support has been indicated for Wall Unit No. 31 in Wall Panel No. 30.

45. Engineering plans must contain sufficient detail so that a competent contractor could reasonably expect to produce a safe building. Respondent's plans do not contain this detail.

46. An engineer must comply with the manufacturer's recommendations unless he can justify the deviations. Respondent has not complied with the manufacturer's recommendations and has not justified his deviation.

47. Respondent's structural engineering experience is limited to his use of structural insulated panels.

48. Respondent's explanation for the deficiencies in his plans and drawings is not credible.

49. Respondent's engineering practice in regard to the Berlitz Language Center does not meet the standard of due care required for professional engineers.

50. Respondent was negligent in the practice of engineering.

#### CONCLUSIONS OF LAW

51. The Division of Administrative Hearings has jurisdiction over the subject matter and the parties hereto pursuant to Sections 120.569 and 120.57(1), Florida Statutes.

52. Petitioner is charged with providing administrative, investigative, and prosecutorial services to the Board of Professional Engineers pursuant to Section 471.038(4), Florida Statutes.

53. Respondent is a licensed professional engineer in the State of Florida and subject to discipline by the Board of Professional Engineers.

54. Pursuant to Section 471.033(3), Florida Statutes (Supp. 1998), the Board of Professional Engineers is empowered to revoke, suspend or otherwise discipline the license of a professional engineer for violations of Section 471.033(1)(g), Florida Statutes, for negligence in the practice of engineering.

55. Disciplinary licensing proceedings are penal in nature. <u>State ex rel. Vining v. Florida Real Estate Commission</u>, 281 So. 2d 487 (Fla. 1973). In this discipline licensing proceeding, Petitioner must prove the alleged violations of Section 471.033(1)(g), Florida Statutes, by clear and convincing evidence. <u>Department of Banking and Finance, Division of</u> <u>Securities and Investor Protection v. Osborne, Stern & Company</u>, 670 So. 2d 932 (Fla. 1996).

56. The evidence is clear and convincing that Respondent's drawings are deficient in that they are incomplete, ambiguous, and inconsistent.

57. Respondent's engineering in regard to the stairs was below acceptable engineering standards.

58. Respondent's use of the AFM R-Control Structural Building Panels was contrary to the manufacturer's recommendations.

59. The evidence was clear and convincing that Respondent was negligent in the practice of engineering.

#### RECOMMENDATION

Based upon the foregoing Findings of Fact and Conclusions of Law, it is

RECOMMENDED that the Board of Professional Engineers enter a Final Order finding the Respondent guilty of violating Section 471.033(1)(g), Florida Statutes, engaging in negligence in the practice of engineering.

Pursuant to the Board's disciplinary guidelines found at Rule 61G15-19.004, Florida Administrative Code, it is recommended that Respondent receive a written reprimand, pay an administrative fine of \$4,000.00, and be placed on probation for a period of two years with such conditions that the Board deems appropriate.

DONE AND ENTERED this 8th day of February, 2000, in Tallahassee, Leon County, Florida.

DANIEL M. KILBRIDE Administrative Law Judge Division of Administrative Hearings The DeSoto Building 1230 Apalachee Parkway Tallahassee, Florida 32399-3060 (850) 488-9675 SUNCOM 278-9675 Fax Filing (850) 921-6847 www.doah.state.fl.us

Filed with the Clerk of the Division of Administrative Hearings this 8th day of February, 2000.

COPIES FURNISHED:

Natalie A. Lowe, Esquire Florida Board of Professional Engineers 1208 Hays Street Tallahassee, Florida 32301-0750

William J. Payne, P.E. 7702 Indian Ridge Trail, North Kissimmee, Florida 34747

Dennis Barton, Executive Director Florida Board of Professional Engineers 1208 Hays Street Tallahassee, Florida 32301-0750

Barbara D. Auger, General Counsel Department of Business and Professional Regulation Northwood Centre 1940 North Monroe Street Tallahassee, Florida 32399-0792

## NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the final order in this case.