

Zatta Robert J
 Form 4
 September 13, 2010

FORM 4 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 Zatta Robert J

(Last) (First) (Middle)

C/O ROCKWOOD HOLDINGS, INC., 100 OVERLOOK CENTER

(Street)

PRINCETON, NJ 08540

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
 Rockwood Holdings, Inc. [ROC]

3. Date of Earliest Transaction (Month/Day/Year)
 09/09/2010

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

____ Director _____ 10% Owner
 Officer (give title below) _____ Other (specify below)
 Senior Vice President & CFO

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)
				(A) or (D)	Price		
Common Stock, par value \$0.01	09/09/2010		M	6,845	A \$ 14.61	59,863	D
Common Stock, par value \$0.01	09/09/2010		F	3,571	D \$ 28	56,292	D
Common Stock, par value \$0.01	09/09/2010		M	6,845	A \$ 14.61	63,137	D
Common Stock, par	09/09/2010		F	3,571	D \$ 28	59,566	D

value \$0.01

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Amount or Number of Shares
Stock Options (right to buy)	\$ 14.61	09/09/2010		M	6,845	<u>(1)</u> 09/15/2011	Common Stock, par value \$0.01 per share	6,845
Stock Options (right to buy)	\$ 14.61	09/09/2010		M	6,845	<u>(2)</u> 10/15/2014	Common Stock, par value \$0.01 per share	6,845

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Zatta Robert J C/O ROCKWOOD HOLDINGS, INC. 100 OVERLOOK CENTER PRINCETON, NJ 08540			Senior Vice President & CFO	

Signatures

/s/ Robert J.
Zatta

09/13/2010

Date

__Signature of
Reporting Person

Explanation of Responses:

- * If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) These options were granted on September 15, 2001 and vest 10% on each of the first and second anniversary of grant, 25% on each of the third and fourth anniversary of grant and 30% on the fifth anniversary of grant.
- (2) These options were granted on October 15, 2004 and vested in five equal annual installments beginning October 15, 2005.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.
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