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

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

ARMOUR Residential REIT, Inc.

(Exact Name of Registrant as Specified in its Charter)

Maryland	26-1908/63
(State of Incorporation or Organization)	(I.R.S. Employee Identification No.)
956 Beachland Blvd., Suite 11	
Vero Beach, Florida	32963
(Address of principal executive offices)	(Zip Code)
If this form relates to the registration of a class of securis effective pursuant to General Instruction A.(c), check	urities pursuant to Section 12(b) of the Exchange Act and ck the following box R
If this form relates to the registration of a class of securis effective pursuant to General Instruction A.(d), check	urities pursuant to Section 12(g) of the Exchange Act and ck the following box. \Box
Securities Act registration statement file number to wh	nich this form relates: 333-166847
Securities to be registered pursuant to Section 12(b) or	f the Act:
<u>Title of each class to be registered</u>	Name of each exchange on which each class is to be registered
Common Stock, par value \$0.001 per share	NYSE Amex, LLC
Warrants, each exercisable for one share of Common Stock at an exercise price of \$11.00 per share	NYSE Amex, LLC
Securities to be registered pursuant to Section 12(g) or	f the Act:

None (Title of Class)

INFORMATION REQUIRED IN REGISTRATION STATEMENT

Item 1. Description of Registrant's Securities to be Registered

The securities to be registered hereby are the common stock and warrants of ARMOUR Residential REIT, Inc. (the "Registrant" or "ARMOUR"). The description of the common stock and warrants is contained in the section entitled "Description of Securities" in the Registrant's Registration Statement on Form S-11, File No. 333-166847 (the "Registration Statement") initially filed with the Securities and Exchange Commission on May 14, 2010, together with all amendments filed with respect thereto. This information is incorporated herein by reference. Any form of prospectus or prospectus supplement to the Registration Statement that includes such descriptions and that is subsequently filed is hereby also incorporated by reference herein.

Item 2. Index to Exhibits

The following have been filed as exhibits to the Registration Statement and are hereby incorporated herein by reference:

Exhibit	
Number	Description of Document
3.1	Amended and Restated Articles of Incorporation (incorporated by reference to Exhibit 3.4 to
	ARMOUR's Current Report on Form 8-K filed with the SEC on November 12, 2009)
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.5 to ARMOUR's Current
	Report on Form 8-K filed with the SEC on November 12, 2009)
4.1	Warrant Agreement between Continental Stock Transfer & Trust Company and Enterprise Acquisition
	Corp. (incorporated by reference to Exhibit 4.4 of Amendment No. 2 to Enterprise Acquisition Corp.'s
	Registration Statement on Form S-1 filed with the SEC on October 25, 2007)
4.2	Amendment to Warrant Agreement dated November 6, 2009 (incorporated by reference to Exhibit 4.4 to ARMOUR's Current Report on Form 8-K filed with the SEC on November 12, 2009)
4.3	Specimen Common Stock Certificate of ARMOUR (incorporated by reference to Exhibit 4.2 of
	Amendment No. 4 to ARMOUR's Registration Statement on Form S-4 filed with the SEC on October 13, 2009)
4.4	Specimen Warrant Certificate of ARMOUR (incorporated by reference to Exhibit 4.3 of Amendment
	No. 4 to ARMOUR's Registration Statement on Form S-4 filed with the SEC on October 13, 2009)

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

ARMOUR RESIDENTIAL REIT, INC.

By: /s/ Scott J. Ulm

Scott J. Ulm

Co-Chief Executive Officer, Chief Investment Officer and Head of Risk Management

Dated: June 8, 2010

EXHIBIT INDEX

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