

December 16, 2016

VIA EDGAR

Kim McManus
Senior Counsel
Office of Real Estate and Commodities
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: AG Mortgage Investment Trust, Inc.
Form 10-K for fiscal year end December 31, 2015
Filed February 26, 2016
File No. 001-35151

Dear Ms. McManus:

AG Mortgage Investment Trust, Inc. (the "Company") provides the following responses to the comments contained in the letter of the staff of the Division of Corporation Finance (the "Staff") of the U.S. Securities and Exchange Commission (the "Commission") dated December 5, 2016, regarding the Company's Form 10-K for the fiscal year ended December 31, 2015 filed on February 26, 2016 (the "Form 10-K"). For your convenience, the Company has repeated the text of each of the Staff's comments below in bold and followed each comment with the Company's response.

General

- 1. We note your disclosure on pages 13 and 22 with respect to diversification of your portfolio. In future Exchange Act periodic reports, with respect to your non-Agency RMBS and CMBS, please revise your disclosure to include the geographic diversification of your collateral. Please also expand future Exchange Act periodic reports to discuss the credit quality of your non-Agency RMBS and CMBS.**

The Company acknowledges the Staff's comment and confirms that it will include the geographic diversification of its non-Agency RMBS and CMBS collateral and expand its discussion on the credit quality of its non-Agency RMBS and CMBS in future Exchange Act periodic reports, commencing with its Form 10-K for fiscal year-end 2016.

Investment income, financing and hedging costs, page 65

- 2. In future Exchange Act reports, please discuss the reasons for any material trends in your spread or the individual components of the spread to the extent such material trends are driven by management decisions, such as portfolio composition or method of hedging.**

The Company notes the Staff's comment and advises that in future Exchange Act periodic reports it will include additional disclosure discussing the reasons for any material trends in its spread or the individual components of its spread to the extent such material trends are driven by management decisions.

Please do not hesitate to contact me at 212-692-2116 with any comments or questions or if you would like to discuss any topic addressed in this letter.

Sincerely,

/s/ Brian C. Sigman

Brian C. Sigman
Chief Financial Officer