UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

√	ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the fiscal year ended December 31, 2016
	OR
	TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the transition period from to
	Commission file number 1-14959 Brady Corporation
A.	Full title of the plan and the address of the plan, if different from that of the issuer named below:
	BRADY MATCHED 401(k) PLAN
3	Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

BRADY CORPORATION 6555 WEST GOOD HOPE ROAD PO BOX 571 MILWAUKEE WI 53202-0571

Brady Matched 401(k) Plan

Financial Statements as of and for the Years Ended December 31, 2016 and 2015, Supplemental Schedule as of December 31, 2016, and Report of	f
Independent Registered Public Accounting Firm	

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Exhibit 23.1 - Consent of CliftonLarsonAllen LLP

NOTE: All other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable

Report of Independent Registered Public Accounting Firm

Retirement Committee Brady Matched 401(k) Plan Milwaukee, Wisconsin

We have audited the accompanying statements of net assets available for benefits of the Brady Matched 401(k) Plan (the Plan) as of December 31, 2016 and 2015, and the related statements of changes in net assets available for benefits for the years ended December 31, 2016 and 2015. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Brady Matched 401(k) Plan as of December 31, 2016 and 2015, and the changes in net assets available for benefits for the years ended December 31, 2016 and 2015 in conformity with accounting principles generally accepted in the United States of America.

The supplemental schedule of assets (held at end of year) (supplemental information) has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental information is the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental information reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental information. In forming our opinion on the supplemental information, we evaluated whether the supplemental information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental information is fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ CliftonLarsonAllen LLP

Milwaukee, Wisconsin June 13, 2017

BRADY MATCHED 401(k) PLAN STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS December 31, 2016 and 2015

		2016		2015
ASSETS				
Investments - at fair value	\$	216,619,886	\$	206,228,916
Cash		23,531		61,893
Receivables				
Company contributions		1,279,871		1,181,911
Notes receivable from participants		3,123,782		2,859,328
Total receivables		4,403,653		4,041,239
Total assets		221,047,070		210,332,048
LIABILITIES — excess contributions payable		(557)		(6,387)
NET ASSETS AVAILABLE FOR BENEFITS	\$	221,046,513	\$	210,325,661

The accompanying notes are an integral part of the financial statements.

BRADY MATCHED 401(k) PLAN STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS Years Ended December 31, 2016 and 2015

		2016	2015
ADDITIONS TO NET ASSETS ATTRIBUTED TO			
Contributions			
Participant	\$	9,286,349	\$ 8,704,945
Company		4,656,500	4,202,453
Rollover		743,413	477,614
Total contributions		14,686,262	13,385,012
Investment income (loss)			
Net appreciation (depreciation) in fair value of investments		12,201,251	(9,838,254)
Interest and dividends		6,184,964	9,257,845
Net investment income (loss)	,	18,386,215	(580,409)
Interest income from notes receivable from participants		107,270	91,762
Transfers of assets from affiliated plan		_	9,454,860
Total additions		33,179,747	22,351,225
DEDUCTIONS FROM NET ASSETS ATTRIBUTED TO			
Benefits paid to participants		22,093,642	26,614,829
Administrative expenses		365,253	404,413
Total deductions		22,458,895	 27,019,242
NET INCREASE (DECREASE)		10,720,852	(4,668,017)
NET ASSETS AVAILABLE FOR BENEFITS, BEGINNING OF YEAR		210,325,661	214,993,678
NET ASSETS AVAILABLE FOR BENEFITS, END OF YEAR	\$	221,046,513	\$ 210,325,661

The accompanying notes are an integral part of the financial statements.

NOTE 1—DESCRIPTION OF THE PLAN

The following description of the Brady Matched 401(k) Plan (the Plan) is provided for general information purposes only. Participants should refer to the Plan document for more complete information.

General

The Plan is a defined contribution plan, which provides retirement benefits to substantially all full-time employees of Brady Corporation (the Company). The Plan does not provide benefits for employees covered by a collective bargaining agreement, leased employees, non-resident aliens, co-op students, on-call employees or interns. An employee may become a participant in the Plan on the employee's initial date of employment. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Contributions

Each year, participants may contribute up to 50% of their annual eligible compensation subject to the Internal Revenue Code (IRC) limitations. These voluntary contributions can be withdrawn in whole or part in the event of qualifying emergencies (as defined by the Plan), subject to certain restrictions. The Company is required to contribute a 100% matching contribution of the first 3% and 50% of the next 2% that a participant contributes, subject to compensation limits of \$265,000 for calendar year 2016, adjusted for inflation. Participants self-direct all participant and Company contributions. The Plan offers a Roth 401(k) option where contributions are made on an after-tax basis. Upon distribution, Roth contributions are tax-free.

The Company acquired Precision Dynamics Corporation in December 2012, and at that time, the decision was made that the Precision Dynamics Cash Option 401(k) Plan would not be merged into the Plan. The Precision Dynamics Cash Option 401(k) Plan was frozen in 2013 and these employees became eligible, via Board Resolution, to participate in the Plan effective January 1, 2014. The participant accounts rolled into the Plan on August 3, 2015. Brady received approval from the IRS to terminate the Precision Dynamics Cash Option 401(k) Plan on August 11, 2015 and the official termination date was November 13, 2015.

Participant Accounts

Individual accounts are maintained for each Plan participant. Each participant's account is credited with the participant's contribution, the Company's matching contribution and Plan earnings, and charged with withdrawals and an allocation of Plan losses and administrative expenses as defined by the Plan. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account. For any newly eligible participant, the Plan will automatically withhold 5% of the employee's eligible compensation, unless an on line election is completed by the participant to opt out within ninety days of his or her hire date. The withheld funds will be deposited into an account under the employee's name in the Plan and funded in the Roth 401(k) option in absence of a designation by the participant.

Investments

Investment options include various mutual funds, common collective trust funds and Brady Corporation Class A Non-Voting Common Stock.

NOTE 1—DESCRIPTION OF THE PLAN (continued)

Vesting

The Plan provides for full vesting of participants' contributions from the date they are made. Company contributions will become vested after a two-year period of continuous service. The participants' share of the Company contribution becomes fully vested, in any event, upon normal retirement at age 65, termination due to permanent or total disability or death, or a plan termination.

Participants may withdraw their vested interests upon retirement, approved hardship withdrawal, death, disability, or other termination of employment. Withdrawals are made at the participant's option in the form of a lump sum, installments, or in-kind in shares of Brady Corporation Class A Non-Voting Common Stock.

Payment of Benefits

On termination of service due to death, disability, or retirement, a participant may elect to receive either a lump-sum amount equal to the value of the participant's vested interest in his or her account, or installments over a specified period. For termination of service for other reasons, a participant may receive the value of the vested interest in his or her account as a lump-sum distribution.

Forfeited Accounts

At December 31, 2016 and 2015, forfeited non-vested accounts totaled \$60,024 and \$52,064, respectively. Total forfeitures used to reduce Company contributions were \$0 and \$339,118 in 2016 and 2015, respectively. Effective January 1, 2016, forfeited non-vested accounts that were previously used to reduce Company contributions are now used to offset plan administrative fees. Total forfeitures used to offset plan administrative fees in calendar year 2016 was \$213,216.

Notes Receivable from Participants

Participants may borrow up to 50% of their vested account balance. Individual loan amounts must be at least \$1,000; however, aggregate loan amounts may not exceed \$50,000. The interest rate for the loans is the prime rate. Loan terms may range from one to five years, or longer if for the purchase of a primary residence. The loans are secured by the balance in the participant's account. As of December 31, 2016, the interest rates on outstanding loans range from 3.25% to 9.00%.

NOTE 2—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The accompanying financial statements have been prepared under the accrual basis in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires Plan management to make estimates and assumptions that affect the reported amounts of net assets available for benefits and changes therein. Actual results could differ from those estimates.

Risks and Uncertainties

The Plan utilizes various investment instruments, including various mutual funds, common collective trust funds and common stock. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

Investment Valuation and Income Recognition

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 3 for discussion of fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the exdividend date. Net appreciation (depreciation) includes the Plan's gains and losses on investments bought and sold as well as held during the year.

Management fees and operating expenses charged to the Plan for investments in the mutual funds are deducted from income earned on a daily basis and are not separately reflected. Consequently, management fees and operating expenses are reflected as a reduction of investment return for such investments.

Administrative Expenses

Administrative expenses are paid by the Plan. This includes administrative, investment management, audit, legal and other miscellaneous fees of the Plan.

Payment of Benefits

Benefit payments to participants are recorded upon distribution. There was \$21,677 and \$57,313 allocated to accounts of persons who have elected to withdraw from the Plan, but had not yet been paid as of December 31, 2016 and 2015 respectively.

Notes Receivable from Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Related fees are recorded as administrative expenses and expensed as incurred. Delinquent participant loans are reclassified as distributions based upon the terms of the Plan document.

NOTE 2—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Excess Contributions Payable

The Plan is required to return contributions received during the Plan year in excess of the IRC limits to the contributing participants. There were excess contributions and contribution corrections of \$557 and \$6,387 for the years ended December 31, 2016 and 2015 respectively.

Recent Accounting Pronouncements

In July 2015, the FASB issued ASU No. 2015-12, "Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965): (Part I) Fully Benefit-Responsive Investment Contracts, (Part II) Plan Investment Disclosures, (Part III) Measurement Date Practical Expedient," which designates contract value as the only required measure for fully benefit responsive investment contracts, simplifies and makes more effective investment disclosure requirements, and provides a practical expedient when a plan's fiscal year-end does not coincide with month-end. This ASU is effective for fiscal years beginning after December 31, 2015. The Plan has adopted Parts I and II of this ASU. The Plan has retrospectively applied Parts I and II of this ASU. Part III is not applicable to the Plan.

Subsequent Events

The Plan has evaluated subsequent events through June 13, 2017, the date the financial statements were issued.

NOTE 3—FAIR VALUE MEASUREMENT

Accounting principles generally accepted in the United States of America (U.S. GAAP) establishes a hierarchal disclosure framework which prioritizes and ranks the level of observable inputs used in measuring fair value.

Additionally, U.S. GAAP defines fair value as the price that would be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). The Plan primarily applies the market approach for recurring fair value measurements and attempts to utilize the best available information. Accordingly, the Plan also utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. The Plan is able to classify fair value balances based on the observability of those inputs. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

The Plan's assets measured at fair market value are classified in one of the following categories:

- Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.
- Level 2 Inputs to the valuation methodology include:
 - quoted prices for similar assets or liabilities in active markets;
 - quoted prices for identical or similar assets or liabilities in inactive markets;
 - inputs other than quoted prices that are observable for the asset or liability;
 - inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any inputs that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

NOTE 3—FAIR VALUE MEASUREMENT (continued)

The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2016 and 2015.

Brady common stock is valued at the closing price reported on the active market on which the individual securities are traded.

Shares of mutual funds are valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value (NAV) and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

The common collective trust funds are valued at the net asset value. Net asset value is a readily determinable fair value of the underlying assets and is the basis for current transactions.

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2016.

	Level 1	Level 2	Level 3	Total
Mutual funds	\$ 125,859,440	\$ _	\$ —	\$ 125,859,440
Brady common stock	4,841,414	_	_	4,841,414
Common collective trust funds	_	85,919,032	_	85,919,032
Total	\$ 130,700,854	\$ 85,919,032	\$ —	\$ 216,619,886

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2015.

	Level 1	Level 2	Level 3	Total
Mutual funds	\$ 177,238,836	\$ _	\$ _	\$ 177,238,836
Brady common stock	3,269,634	_	_	3,269,634
Common collective trust fund	_	25,720,446	_	25,720,446
Total	\$ 180,508,470	\$ 25,720,446	\$ _	\$ 206,228,916

NOTE 4—PLAN TERMINATION

Although it has not expressed any intention to do so, the Company has the right under the Plan provisions to discontinue its contributions at any time and to terminate the Plan subject to the provisions set forth in ERISA. In the event that the Plan is terminated, participants would become fully vested in unvested Company matching contributions in their accounts. Distribution of such account balances shall be made by the Trustee to the participants within a reasonable time.

NOTE 5—FEDERAL INCOME TAX STATUS

The Plan uses a prototype plan document sponsored by PNC Bank (PNC or the Trustee). PNC received an opinion letter from the Internal Revenue Service (IRS), dated March 31, 2014, which states that the prototype document satisfies the applicable provisions of the IRC. The Plan itself has not received an opinion letter from the IRS. However, the Plan's management believes that the Plan is currently designed and being operated in compliance with the applicable requirements of the IRC. Therefore, no provision for income tax has been included in the Plan's financial statements.

Accounting principles generally accepted in the United States of America require plan management to evaluate tax positions taken by the plan and recognize a tax liability if the organization has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

NOTE 6—EXEMPT PARTY-IN-INTEREST TRANSACTIONS

The Plan invests in Company common stock. In addition, certain plan investments represent a common collective trust fund managed by the Trustee. These transactions are considered party-in-interest transactions. These transactions are not, however, considered prohibited transactions under ERISA regulations. Fees paid by the Plan for investment management services were included as a reduction of the return earned on each fund.

At December 31, 2016 and 2015, the Plan held 128,928 and 142,276 shares, respectively, of common stock of Brady Corporation, with a cost basis of \$3,415,287 and \$3,542,028, respectively. During the years ended December 31, 2016 and 2015, the Plan recorded dividend income from the common stock of Brady Corporation of \$110,764 and \$110,522, respectively.

NOTE 7—RECONCILIATION TO FORM 5500

The following table reconciles net assets available for benefits per the financial statements to the Plan's Form 5500 as of December 31:

	2016	2015
Net assets available for benefits per financial statements	\$ 221,046,513	\$ 210,325,661
Adjustment for the difference between fair value on the financial statements and the 5500	_	192,984
Benefits payable	(21,677)	(57,313)
Amounts reported per Form 5500	\$ 221,024,836	\$ 210,461,332

The following table reconciles the increase (decrease) in net assets available for benefits per the financial statements to the Form 5500 for the year ended December 31:

	2016	2015
Increase (decrease) in net assets available for benefits per financial statements	\$ 10,720,852	\$ (4,668,017)
Adjustment for the difference between fair value on the financial statements and the 5500 at end of		
year	_	192,984
Adjustment for the difference between fair value on the financial statements and the 5500 at		
beginning of year	(192,984)	(259,033)
Benefits payable at end of year	(21,677)	(57,313)
Benefits payable at beginning of year	57,313	 113,144
Amounts reported per Form 5500	\$ 10,563,504	\$ (4,678,235)

This information is an integral part of the accompanying financial statements.

SUPPLEMENTAL SCHEDULE

BRADY MATCHED 401(k) PLAN SCHEDULE H, LINE 4i—SCHEDULE OF ASSETS (HELD AT END OF YEAR) AS OF DECEMBER 31, 2016

EIN #: 39-0178960 Plan #: 003

<u>Identity of Issuer, Lessor, or Similar Party</u>	Cost**		Current Value
MUTUAL FUNDS			
Growth Fund of America		\$	33,225,331
Fidelity Diversified International Fund			11,013,971
American Century Small Cap Value			10,204,591
LSV Value Equity Fund			12,691,550
Oppenheimer Developing Markets			6,911,630
Wasatch Frontier Emerging Small Countries			785,060
Voya Smallcap Opportunities			9,624,679
PIMCO CommoditiesPLUS Strategy Fund			3,089,100
Vanguard Total Stock Market Index Fund			22,550,731
Vanguard Total Bond Market Index Fund			13,429,029
MFS Emerging Markets Debt			2,333,768
			125,859,440
COMMON COLLECTIVE TRUST FUNDS			
PNC Stable Value Fund*			26,792,015
T. Rowe Price Retirement 2010 Trust			3,585,293
T. Rowe Price Retirement 2020 Trust			11,041,514
T. Rowe Price Retirement 2030 Trust			19,205,198
T. Rowe Price Retirement 2040 Trust			15,869,704
T. Rowe Price Retirement 2050 Trust			8,561,431
T. Rowe Price Retirement 2060 Trust			230,969
T. Rowe Price Retirement Balanced Fund Trust			632,908
		·	85,919,032
COMMON STOCK		'	
Brady Corporation Class A Non-voting*			4,841,414
Brudy Corporation Chass It Ivon voting			7,071,717
NOTES RECEIVABLE from PARTICIPANTS, at various interest rates and due			
through May 05, 2045*			3,123,782
TOTAL ASSETS (HELD AT END OF YEAR)		\$	219,743,668

^{*} Party-in-interest in the Plan.

^{**} Investments are participant directed and as such cost information is not required.

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

BRADY MATCHED 401(k) PLAN

Date: June 13, 2017 /s/ AARON J. PEARCE

Aaron Pearce

Plan Administrative Committee Member

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-44505 on Form S-8 of our report dated June 13, 2017 appearing in this Annual Report on Form 11-K of Brady Matched 401(k) Plan for the year ended December 31, 2016.

/s/ CliftonLarsonAllen LLP

Milwaukee, Wisconsin

June 13, 2017