



July 22, 2025

Division of Trading and Markets
Office of Market Supervision
Securities and Exchange Commission
100 F. Street, N.E.
Washington, D.C. 20549

**RE: MIAx Sapphire, LLC ("SAPPHIRE")
Amendment 2025-15 to Form 1 Application**

Dear Sir/Madam:

Enclosed for official filing pursuant to Rule 6a-2(a) is Amendment 2025-15 to the Form 1 Application of SAPPHIRE, which includes the following changes:

Exhibit C – Amended and Restated Certificate of Incorporation and updated directors and committees of Miami International Holdings, Inc.

Please do not hesitate to contact me if you have any questions in connection with this matter.

Sincerely,

A handwritten signature in black ink that reads "Barbara J. Comly". The signature is written in a cursive, flowing style.

Barbara J. Comly
EVP, General Counsel & Corporate Secretary

Enclosure

cc: Marlene Olsen

Form 1 Page 1 Execution Page	UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 APPLICATION FOR, AND AMENDMENTS TO APPLICATION FOR, REGISTRATION AS A NATIONAL SECURITIES EXCHANGE OR EXEMPTION FROM REGISTRATION PURSUANT TO SECTION 5 OF THE EXCHANGE ACT	Date filed (MM/DD/YY): 07/22/25	OFFICIAL USE ONLY
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Warning: Failure to keep this form current and to file accurate supplementary information on a timely basis, or the failure to keep accurate books and records or otherwise comply with the provisions of law applying to the conduct of the applicant would violate the federal securities laws and may result in disciplinary, administrative or criminal action

INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACTS MAY CONSTITUTE CRIMINAL VIOLATIONS

APPLICATION AMENDMENT

1. State the name of the applicant: MIAX Sapphire, LLC
2. Provide the applicant's primary street address: 7 Roszel Road, Suite 1A, Princeton, NJ 08540
3. Provide the applicant's mailing address (if different):

4. Provide the applicant's business telephone and facsimile number:
Telephone: 609-897-7300; Facsimile: 609-987-2210



25000272

5. Provide the name, title and telephone number of a contact employee:
Barbara J. Comly, EVP, General Counsel & Corporate Secretary
609-897-7315

6. Provide the name and address of counsel for the applicant:
Barbara J. Comly, EVP, General Counsel & Corporate Secretary
MIAX Sapphire, LLC
7 Roszel Road, Suite 1A
Princeton, NJ 08540

7. Provide the date applicant's fiscal year ends: December 31

8. Indicate legal status of applicant: Corporation Sole Proprietorship Partnership
 Limited Liability Company Other (specify):

If other than a sole proprietor, indicate the date and place where applicant obtained its legal status (e.g. state where incorporated, place where partnership agreement was filed or where applicant entity was formed):

(a) Date (MM/DD/YY): 04/06/23 (b) State/Country of formation: Delaware

(c) Statute under which applicant was organized: Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.)

EXECUTION: The applicant consents that service of any civil action brought by, or notice of any proceeding before, the Securities and Exchange Commission in connection with the applicant's activities may be given by registered or certified mail or confirmed telegram to the applicant's contact employee at the main address, or mailing address if different, given in Items 2 and 3. The undersigned, being first duly sworn, deposes and says that he/she has executed this form on behalf of, and with the authority of, said applicant. The undersigned and applicant represent that the information and statements contained herein, including exhibits, schedules, or other documents attached hereto, and other information filed herewith, all of which are made a part hereof, are current, true, and complete.

MIAX SAPPHIRE, LLC

Date: July 22, 2025

By: 
Barbara J. Comly
EVP, General Counsel & Corporate Secretary

Subscribed and sworn before me this 22nd day of July, 2025.


Jane Post
Notary Public of the State of New Jersey
My Commission Expires October 27, 2029



**This page must always be completed in full with original, manual signature and notarization.
Affix notary stamp or seal where applicable.**

EXHIBIT C

Exhibit Request:

For each subsidiary or affiliate of the applicant, and for any entity with whom the applicant has a contractual or other agreement relating to the operation of an electronic trading system to be used to effect transactions on the exchange (“System”), provide the following information:

1. Name and address of organization.
2. Form of organization (e.g., association, corporation, partnership, etc.).
3. Name of state and statute citation under which organized. Date of incorporation in present form.
4. Brief description of nature and extent of affiliation.
5. Brief description of business or functions. Description should include responsibilities with respect to operation of the System and/or execution, reporting, clearance, or settlement of transactions in connection with operation of the System.
6. A copy of the constitution.
7. A copy of the articles of incorporation or association including all amendments.
8. A copy of existing by-laws or corresponding rules or instruments.
9. The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions.
10. An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association.

Response:

A. MIAMI INTERNATIONAL HOLDINGS, INC.

1. *Name:* Miami International Holdings, Inc.
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Corporation.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware General Corporation Law (8 Del. C. § 1-101, et seq.), on November 14, 2007.
4. *Brief description of nature and extent of affiliation:* MIAX Sapphire, LLC is a wholly-owned subsidiary of Miami International Holdings, Inc. (“MIH”).
5. *Brief description of business or functions:* Miami International Holdings, Inc. is a holding company which holds 100% of the equity of:

- Miami International Securities Exchange, LLC;
- MIAX PEARL, LLC;
- MIAX Emerald, LLC;
- MIAX Sapphire, LLC;
- Miami International Technologies, LLC;
- MIAX Global Derivatives, LLC, the sole member and owner of 100% of the equity and voting securities of (i) M 402 Holdings, LLC, which is the sole member and owner of 100% of the equity and voting securities of MIAX Futures Exchange, LLC, and (ii) M 7 Holdings, LLC, which is the sole member and owner of 100% of the equity and voting securities of LedgerX LLC d/b/a MIAX Derivatives Exchange;
- M 9 Holdings, LLC;
- The Bermuda Stock Exchange;
- MGEX Real Estate Holdings, LLC;
- MIAX Global, LLC;
- MIAX Products, LLC;
- Dorman Trading, LLC;
- MIH East Holdings, Limited; and
- The International Stock Exchange Group Limited which is the sole owner of The International Stock Exchange Authority Limited.

Miami International Holdings, Inc. is the entity through which the ultimate owners of the applicant indirectly hold their ownership interest in the applicant and its affiliates.

6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Amended and Restated Certificate of Incorporation dated July 15, 2025 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated By-Laws dated June 27, 2015 are attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of Miami International Holdings, Inc.

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Douglas M. Schafer Jr.	Chief Information Officer and Executive Vice President
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer
Joseph Bracco	Executive Vice President – Global Head of Sales
Shelly Brown	Executive Vice President – Strategic Planning and Business Development
Edward Deitzel	Executive Vice President and Chief Regulatory Officer
Randy Foster	Executive Vice President – Business Systems Development
Harish Jayabalan	Executive Vice President – Chief Risk Officer and Chief Information Security Officer
Matthew Rotella	Executive Vice President – Chief Technology Officer
John Smollen	Executive Vice President – Head of Exchange Traded Products and Strategic Relations
Kelli Annequin	Senior Vice President – Chief Marketing Officer

Name	Title
Charles Blades	Senior Vice President – Controller
Kelly Brown	Senior Vice President – Derivative Products and Business Development
Deborah Carroll	Senior Vice President – Associate General Counsel and Assistant Corporate Secretary
Joseph W. Ferraro III	Senior Vice President – Deputy General Counsel
Rodney Hester	Senior Vice President – Systems Infrastructure
Steven F. Ivey	Senior Vice President – Futures Risk Management
Amy Neiley-Avayou	Senior Vice President – Trading Operations and Listings
Paul Anders (Andy) Nybo	Senior Vice President – Chief Communications Officer
Vinay Rao	Senior Vice President – Trading Systems Development
Siddharth Sahoo	Senior Vice President – Trading Systems Development
Margo Bailey	Vice President – Senior Counsel
Todd Borneman	Vice President – Data Services
Kateryna Brezitska	Vice President – Systems Requirements and Analysis
Daniel Brill	Vice President – Systems Requirements
Liang Cao	Vice President – Business Systems Development
Christopher Chapman	Vice President – Strategic Planning & Business Development
Jonathan Dowd	Vice President – Systems Requirements
Mitchell Garfinkel	Vice President – Finance
Carlo Giansanti	Vice President – Vendor Management
Lindsay R. Hopkins	Vice President – Senior Counsel
Daniel Hsu	Vice President – Exchange Pricing & Business Analysis
Joseph P. Kamnik	Vice President – Senior Counsel
Gamini Karunaratne	Vice President – Network Engineering & Data Center Operations
Brendan Murphy	Vice President – Member Relations and Development
James O’Neil	Vice President and Director of Physical Security and Safety
Gerard (Chaz) Palmeri	Vice President – Systems Operations
Dominique Prunetti Miller	Vice President – Human Resources and Corporate Relations
Christopher Solgan	Vice President – Senior Counsel
Peter D. Sparby	Vice President
Tia Toms	Vice President – Administration
Gregory Ziegler	Vice President – Senior Counsel
Alessandra Corona	Assistant Vice President – Associate Counsel
Nathan Gaudio	Assistant Vice President – Strategic Planning & Business Development
Tatiana Kitaigorovski	Assistant Vice President – Associate Counsel
Matt Leisen	Assistant Vice President – Counsel
Tao Pan	Assistant Vice President – Associate Counsel
Ketan Patel	Assistant Vice President – Information Security
Zachary G. Pendleton	Assistant Vice President – Privacy and Data Governance Counsel
Priya Rege	Assistant Vice President – Business Systems Development
Gagan Singh	Assistant Vice President – Business Systems Development
Michael Slade	Assistant Vice President – Associate Counsel
Carmen Stuhlmann	Assistant Vice President – Associate Counsel

The officers of Miami International Holdings, Inc. serve until their successors are appointed in accordance with the By-Laws of Miami International Holdings, Inc. Officers of Miami International Holdings, Inc. serve at the direction of the Board of Directors.

Directors of Miami International Holdings, Inc.

Directors
Thomas P. Gallagher (Chair)
Talal Jassim Al-Bahar
John Beckelman
Lee Becker
David Brown
Kurt M. Eckert
Mark I. Massad
Lisa Moore
Jamil Nazarali
Mark F. Raymond
Cynthia Schwarzkopf
Murray Stahl
Paul V. Stahlin
J. Gray Teekell

Directors of Miami International Holdings, Inc. serve one year terms.

Committees of Miami International Holdings, Inc.

Audit Committee
Paul V. Stahlin (Chair)
David Brown
Lisa Moore

Compensation Committee
Talal Jassim Al-Bahar (Chair)
Mark F. Raymond
J. Gray Teekell

Nominating and Corporate Governance Committee
Mark F. Raymond (Chair)
Cynthia Schwarzkopf

Risk Committee
Lisa Moore (Chair)
Kurt M. Eckert
Paul V. Stahlin

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

B. MIAMI INTERNATIONAL SECURITIES EXCHANGE, LLC

1. *Name:* Miami International Securities Exchange, LLC
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on September 10, 2007.
4. *Brief description of nature and extent of affiliation:* Miami International Securities Exchange, LLC is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* Miami International Securities Exchange, LLC ("MIAX") is registered as a National Securities Exchange under Section 6 of the Securities Exchange Act of 1934, as amended. MIAX operates a fully electronic options trading platform.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Amended and Restated Certificate of Formation dated November 12, 2020 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Third Amended and Restated Limited Liability Company Agreement dated November 12, 2020, and Amended and Restated By-Laws dated February 10, 2025 are attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of Miami International Securities Exchange, LLC

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer/President
Douglas M. Schafer Jr.	Chief Information Officer and Executive Vice President
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer/Treasurer
Joseph S. Bracco	Executive Vice President – Global Head of Sales
Shelly Brown	Executive Vice President – Strategic Planning and Business Development
Edward Deitzel	Executive Vice President, Chief Regulatory Officer and Chief Compliance Officer
Randy Foster	Executive Vice President – Business Systems Development
Harish Jayabalan	Executive Vice President – Chief Risk Officer and Chief Information Security Officer
Matthew Rotella	Executive Vice President – Chief Technology Officer
John Smollen	Executive Vice President – Head of Exchange Traded Products and Strategic Relations
Kelli Annequin	Senior Vice President – Chief Marketing Officer
Charles Blades	Senior Vice President – Controller
Deborah Carroll	Senior Vice President – Associate General Counsel and Assistant Corporate Secretary

Name	Title
Joseph W. Ferraro III	Senior Vice President – Deputy General Counsel
Rodney Hester	Senior Vice President – Systems Infrastructure
Amy Neiley-Avayou	Senior Vice President – Trading Operations and Listings
Paul Anders (Andy) Nybo	Senior Vice President – Chief Communications Officer
Vinay Rao	Senior Vice President – Trading Systems Development
Siddharth Sahoo	Senior Vice President – Trading Systems Development
Peter Bon Viso	Vice President – Regulatory Counsel
Todd Borneman	Vice President – Data Services
Kateryna Brezitska	Vice President – Systems Requirements and Analysis
Daniel Brill	Vice President – Systems Requirements
Liang Cao	Vice President – Business Systems Development
Christopher Chapman	Vice President – Strategic Planning & Business Development
Neil Collins	Vice President – Regulatory Operations
Jonathan S. Dowd	Vice President – Systems Requirements
Laurence Gardner	Vice President – Regulatory Operations
Mitchell Garfinkel	Vice President – Finance
Carlo Giansanti	Vice President – Vendor Management
Daniel Hsu	Vice President – Exchange Pricing & Business Analysis
Joseph P. Kamnik	Vice President – Senior Counsel
Gamini Karunaratne	Vice President – Network Engineering & Data Center Operations
Ronald Miller	Vice President – Compliance
Brendan Murphy	Vice President – Member Relations and Development
Lawrence O’Leary	Vice President – Regulatory Oversight
James O’Neil	Vice President and Director of Physical Security and Safety
Gerard (Chaz) Palmeri	Vice President – Systems Operations
Dominique Prunetti Miller	Vice President – Human Resources and Corporate Relations
Christopher Solgan	Vice President – Senior Counsel
Christopher Swisher	Vice President – Market Surveillance
Tia Toms	Vice President – Administration
Bruce Ulriksen	Vice President – Regulatory Operations, Trading Floor Oversight
Gregory Ziegler	Vice President – Senior Counsel
Nathan Gaudio	Assistant Vice President – Strategic Planning & Business Development
Tatiana Kitaigorovski	Assistant Vice President – Associate Counsel
Tao Pan	Assistant Vice President – Associate Counsel
Ketan Patel	Assistant Vice President – Information Security
Zachary G. Pendleton	Assistant Vice President – Privacy and Data Governance Counsel
Priya Rege	Assistant Vice President – Business Systems Development
Gagan Singh	Assistant Vice President – Business Systems Development
Michael Slade	Assistant Vice President – Associate Counsel

The officers of Miami International Securities Exchange, LLC serve until their successors are appointed in accordance with the By-Laws of Miami International Securities Exchange, LLC. Officers of Miami International Securities Exchange, LLC serve at the direction of the Board of Directors.

Directors of Miami International Securities Exchange, LLC

Directors
Thomas P. Gallagher (Chair)
Michael P. Ameen
Lindsay L. Burbage
Robert Castrignano
Marianne Deane
John DiBacco, Jr.
David Dooman
Leslie Florio
Lawrence E. Jaffe
Paul Jiganti
John A. Kinahan
William V. Looney, Jr.
John E. McCormac
Nathaniel Pomeroy
Robert D. Prunetti
Joseph Sellitto
Cynthia Schwarzkopf
J. Gray Teekell
Observers
John Fischer

Standing Committees of Miami International Securities Exchange, LLC

Audit Committee
Robert D. Prunetti (Chair)
Michael P. Ameen
John E. McCormac

Regulatory Oversight Committee
Lindsay L. Burbage (Chair)
Leslie Florio
Lawrence E. Jaffe

Appeals Committee
Lawrence Jaffe (Chair)
Robert Castrignano
Nathaniel Pomeroy

Technology Committee
Leslie Florio (Chair)
Robert Castrignano
Marianne Deane
David Dooman
John A. Kinahan
John E. McCormac

Nathaniel Pomeroy
Cynthia Schwarzkopf
J. Gray Teekell

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

C. MIAX PEARL, LLC

- Name:* MIAX PEARL, LLC
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
- Form of organization:* Limited Liability Company.
- Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on February 11, 2016.
- Brief description of nature and extent of affiliation:* MIAX PEARL, LLC ("MIAX PEARL") is wholly owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
- Brief description of business or functions:* MIAX PEARL is registered as a National Securities Exchange under Section 6 of the Securities Exchange Act of 1934, as amended. MIAX PEARL operates fully electronic options and equities trading platforms.
- A copy of the constitution:* Not applicable.
- A copy of the articles of incorporation or association including all amendments:* The Restated Certificate of Formation dated November 12, 2020 is attached.
- A copy of existing by-laws or corresponding rules or instruments:* The Second Amended and Restated Limited Liability Company Agreement dated November 12, 2020 and Amended and Restated By-Laws dated February 10, 2025 are attached.
- The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of MIAX PEARL, LLC

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer/President
Douglas M. Schafer Jr.	Chief Information Officer and Executive Vice President
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer/Treasurer
Joseph S. Bracco	Executive Vice President – Global Head of Sales
Shelly Brown	Executive Vice President – Strategic Planning and Business Development
Edward Deitzel	Executive Vice President, Chief Regulatory Officer and Chief Compliance Officer
Randy Foster	Executive Vice President – Business Systems Development

Name	Title
Harish Jayabalan	Executive Vice President – Chief Risk Officer and Chief Information Security Officer
Matthew Rotella	Executive Vice President – Chief Technology Officer
John Smollen	Executive Vice President – Head of Exchange Traded Products and Strategic Relations
Kelli Annequin	Senior Vice President – Chief Marketing Officer
Charles Blades	Senior Vice President – Controller
Deborah Carroll	Senior Vice President – Associate General Counsel and Assistant Corporate Secretary
Joseph W. Ferraro III	Senior Vice President – Deputy General Counsel
Rodney Hester	Senior Vice President – Systems Infrastructure
Amy Neiley-Avayou	Senior Vice President – Trading Operations and Listings
Paul Anders (Andy) Nybo	Senior Vice President – Chief Communications Officer
Vinay Rao	Senior Vice President – Trading Systems Development
Siddharth Sahoo	Senior Vice President – Trading Systems Development
Peter Bon Viso	Vice President – Regulatory Counsel
Todd Borneman	Vice President – Data Services
Kateryna Brezitska	Vice President – Systems Requirements and Analysis
Daniel Brill	Vice President – Systems Requirements
Liang Cao	Vice President – Business Systems Development
Christopher Chapman	Vice President – Strategic Planning & Business Development
Neil Collins	Vice President – Regulatory Operations
Jonathan S. Dowd	Vice President – Systems Requirements
Laurence Gardner	Vice President – Regulatory Operations
Mitchell Garfinkel	Vice President – Finance
Carlo Giansanti	Vice President – Vendor Management
Daniel Hsu	Vice President – Exchange Pricing & Business Analysis
Joseph P. Kamnik	Vice President – Senior Counsel
Gamini Karunaratne	Vice President – Network Engineering & Data Center Operations
Ronald Miller	Vice President – Compliance
Brendan Murphy	Vice President – Member Relations and Development
Lawrence O’Leary	Vice President – Regulatory Oversight
James O’Neil	Vice President and Director of Physical Security and Safety
Gerard (Chaz) Palmeri	Vice President – Systems Operations
Dominique Prunetti Miller	Vice President – Human Resources and Corporate Relations
Christopher Solgan	Vice President – Senior Counsel
Christopher Swisher	Vice President – Market Surveillance
Tia Toms	Vice President – Administration
Bruce Ulriksen	Vice President – Regulatory Operations, Trading Floor Oversight
Gregory Ziegler	Vice President – Senior Counsel
Nathan Gaudio	Assistant Vice President – Strategic Planning & Business Development
Tatiana Kitaigorovski	Assistant Vice President – Associate Counsel
Tao Pan	Assistant Vice President – Associate Counsel
Ketan Patel	Assistant Vice President – Information Security
Zachary G. Pendleton	Assistant Vice President – Privacy and Data Governance Counsel
Priya Rege	Assistant Vice President – Business Systems Development

Name	Title
Gagan Singh	Assistant Vice President – Business Systems Development
Michael Slade	Assistant Vice President – Associate Counsel

The officers of MIAX PEARL, LLC serve until their successors are appointed in accordance with the By-Laws of MIAX PEARL, LLC. Officers of MIAX PEARL, LLC serve at the direction of the Board of Directors.

Directors of MIAX PEARL, LLC

Directors
Thomas P. Gallagher (Chair)
Talal Jassim Al-Bahar
Sean Barry
William T. Bergman
David Brown
Lindsay L. Burbage
Guy Dowman
Kurt M. Eckert
Leslie Florio
Michael Harrington
Lawrence E. Jaffe
Paul Kenyon
John E. McCormac
Miguel Moratiel
William J. O'Brien IV
Nathaniel Pomeroy
Robert D. Prunetti
Scott Richardson
Cynthia Schwarzkopf
Steven Sosnick
Erik Swanson
Christopher L. Whittington

Standing Committees of MIAX PEARL, LLC

Audit Committee
Robert D. Prunetti (Chair)
John E. McCormac
Cynthia Schwarzkopf

Regulatory Oversight Committee
Lindsay L. Burbage (Chair)
Leslie Florio
Lawrence E. Jaffe

Appeals Committee
Lawrence E. Jaffe (Chair)
Kurt M. Eckert
Guy Dowman

Technology Committee
Leslie Florio (Chair)
Sean Barry
David Brown
Kurt M. Eckert
John E. McCormac

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

D. MIAX EMERALD, LLC

- Name:* MIAX Emerald, LLC
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
- Form of organization:* Limited Liability Company.
- Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on January 30, 2018.
- Brief description of nature and extent of affiliation:* MIAX Emerald, LLC ("MIAX Emerald") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
- Brief description of business or functions:* MIAX Emerald is registered as a National Securities Exchange under Section 6 of the Securities Exchange Act of 1934, as amended. MIAX Emerald operates a fully electronic options trading platform.
- A copy of the constitution:* Not applicable.
- A copy of the articles of incorporation or association including all amendments:* The Amended and Restated Certificate of Formation dated November 12, 2020 is attached.
- A copy of existing by-laws or corresponding rules or instruments:* The Second Amended and Restated Limited Liability Company Agreement dated November 12, 2020 and Amended and Restated By-Laws dated February 10, 2025 are attached.
- The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of MIAX Emerald, LLC

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer/President
Douglas M. Schafer Jr.	Chief Information Officer and Executive Vice President

Name	Title
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer/Treasurer
Joseph S. Bracco	Executive Vice President – Global Head of Sales
Shelly Brown	Executive Vice President – Strategic Planning and Business Development
Edward Deitzel	Executive Vice President, Chief Regulatory Officer and Chief Compliance Officer
Randy Foster	Executive Vice President – Business Systems Development
Harish Jayabalan	Executive Vice President – Chief Risk Officer and Chief Information Security Officer
Matthew Rotella	Executive Vice President – Chief Technology Officer
John Smollen	Executive Vice President – Head of Exchange Traded Products and Strategic Relations
Kelli Annequin	Senior Vice President – Chief Marketing Officer
Charles Blades	Senior Vice President – Controller
Deborah Carroll	Senior Vice President – Associate General Counsel and Assistant Corporate Secretary
Joseph W. Ferraro III	Senior Vice President – Deputy General Counsel
Rodney Hester	Senior Vice President – Systems Infrastructure
Amy Neiley-Avayou	Senior Vice President – Trading Operations and Listings
Paul Anders (Andy) Nybo	Senior Vice President – Chief Communications Officer
Vinay Rao	Senior Vice President – Trading Systems Development
Siddharth Sahoo	Senior Vice President – Trading Systems Development
Peter Bon Viso	Vice President – Regulatory Counsel
Todd Borneman	Vice President – Data Services
Kateryna Brezitska	Vice President – Systems Requirements and Analysis
Daniel Brill	Vice President – Systems Requirements
Liang Cao	Vice President – Business Systems Development
Christopher Chapman	Vice President – Strategic Planning & Business Development
Neil Collins	Vice President – Regulatory Operations
Jonathan S. Dowd	Vice President – Systems Requirements
Laurence Gardner	Vice President – Regulatory Operations
Mitchell Garfinkel	Vice President – Finance
Carlo Giansanti	Vice President – Vendor Management
Daniel Hsu	Vice President – Exchange Pricing & Business Analysis
Joseph P. Kamnik	Vice President – Senior Counsel
Gamini Karunaratne	Vice President – Network Engineering & Data Center Operations
Ronald Miller	Vice President – Compliance
Brendan Murphy	Vice President – Member Relations and Development
Lawrence O’Leary	Vice President – Regulatory Oversight
James O’Neil	Vice President and Director of Physical Security and Safety
Gerard (Chaz) Palmeri	Vice President – Systems Operations
Dominique Prunetti Miller	Vice President – Human Resources and Corporate Relations
Christopher Solgan	Vice President – Senior Counsel
Christopher Swisher	Vice President – Market Surveillance
Tia Toms	Vice President – Administration

Name	Title
Bruce Ulriksen	Vice President – Regulatory Operations, Trading Floor Oversight
Gregory Ziegler	Vice President – Senior Counsel
Nathan Gaudio	Assistant Vice President – Strategic Planning & Business Development
Tatiana Kitaigorovski	Assistant Vice President – Associate Counsel
Tao Pan	Assistant Vice President – Associate Counsel
Ketan Patel	Assistant Vice President – Information Security
Zachary G. Pendleton	Assistant Vice President – Privacy and Data Governance Counsel
Priya Rege	Assistant Vice President – Business Systems Development
Gagan Singh	Assistant Vice President – Business Systems Development
Michael Slade	Assistant Vice President – Associate Counsel

The officers of MIAX Emerald, LLC serve until their successors are appointed in accordance with the By-Laws of MIAX Emerald, LLC. Officers of MIAX Emerald, LLC serve at the direction of the Board of Directors.

Directors of MIAX Emerald, LLC

Directors
Thomas P. Gallagher (Chair)
Lindsay L. Burbage
Marianne Deane
Kurt M. Eckert
David S. Fleming
Leslie Florio
Kimberly M. Guadagno
Richard Herr
Adam Hoffman
Paul Jiganti
Joseph M. Kyrillos Jr.
John E. McCormac
Robert D. Prunetti
Liam Smith

Standing Committees of MIAX Emerald, LLC

Audit Committee
Robert D. Prunetti (Chair)
Joseph M. Kyrillos Jr.
John E. McCormac

Regulatory Oversight Committee
Lindsay L. Burbage (Chair)
Leslie Florio
Kimberly M. Guadagno

Appeals Committee
Marianne Deane (Chair)
Kurt M. Eckert
Paul Jiganti

Technology Committee
Leslie Florio (Chair)
Marianne Deane
David S. Fleming
John E. McCormac

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

E. MIAMI INTERNATIONAL TECHNOLOGIES, LLC

1. *Name:* Miami International Technologies, LLC
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on May 12, 2010.
4. *Brief description of nature and extent of affiliation:* Miami International Technologies, LLC ("MIAX Technologies") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* MIAX Technologies engages in the sale and licensing of trading and information technology to unrelated third parties.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Amended and Restated Certificate of Formation dated June 29, 2011 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Second Amended and Restated Limited Liability Company Agreement dated June 25, 2021 is attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of Miami International Technologies, LLC

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Douglas M. Schafer Jr.	President and Chief Information Officer
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer

Name	Title
Harish Jayabalan	Executive Vice President – Chief Information Security Officer
Matthew Rotella	Executive Vice President – Chief Technology Officer
Randy Foster	Executive Vice President – Business Systems Development
Charles Blades	Senior Vice President – Controller
Deborah Carroll	Senior Vice President – Associate General Counsel and Assistant Corporate Secretary
Rodney Hester	Senior Vice President – Systems Infrastructure
Mitchell Garfinkel	Vice President – Finance
James O’Neil	Vice President and Director of Physical Security and Safety
Tia Toms	Vice President – Administration

Directors of Miami International Technologies, LLC

Directors
Thomas P. Gallagher

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

F. MIAX GLOBAL DERIVATIVES, LLC

1. *Name:* MIAX Global Derivatives, LLC (formerly MIAX Futures Holdco, LLC)
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on March 12, 2024.
4. *Brief description of nature and extent of affiliation:* MIAX Global Derivatives, LLC (“MIAX Global Derivatives”) is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner. M 402 Holdings, LLC, and M 7 Holdings, LLC, are wholly-owned subsidiaries of MIAX Global Derivatives.
5. *Brief description of business or functions:* MIAX Global Derivatives is a holding company for futures businesses.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Certificate of Formation dated March 12, 2024 and Certificate of Amendment dated October 4, 2024 are attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated Limited Liability Company Agreement dated October 4, 2024 is attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of MIAX Global Derivatives, LLC

Name	Title
Troy McDonald Kane	Chief Executive Officer
Joseph W. Ferraro III	President
Douglas M. Schafer Jr.	Chief Information Officer and Executive Vice President
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer
Kaitlin Meyer	Vice President – Chief Commercial Officer

Directors of MIAX Global Derivatives, LLC

Directors
Thomas P. Gallagher
Kurt M. Eckert

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

G. M 9 HOLDINGS, LLC

- Name:* M 9 Holdings, LLC (formerly MIAX Futures, LLC)
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
- Form of organization:* Limited Liability Company.
- Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on November 30, 2007.
- Brief description of nature and extent of affiliation:* M 9 Holdings, LLC ("M 9") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
- Brief description of business or functions:* M 9 has operated as a holding company for the outstanding membership interests in ConvexityShares, LLC. ConvexityShares, LLC was merged into M 9 on March 19, 2025.
- A copy of the constitution:* Not applicable.
- A copy of the articles of incorporation or association including all amendments:* The Restated Certificate of Formation dated March 10, 2021 and Certificate of Amendment dated April 25, 2024 are attached.
- A copy of existing by-laws or corresponding rules or instruments:* The Third Amended and Restated Limited Liability Company Agreement dated May 1, 2024 is attached.
- The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of M 9 Holdings, LLC

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Douglas M. Schafer Jr.	Chief Information Officer and Executive Vice President
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer

Directors of M 9 Holdings, LLC

Directors
Thomas P. Gallagher

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

H. THE BERMUDA STOCK EXCHANGE

- Name:* The Bermuda Stock Exchange
Address: 110 Pitts Bay Road, 4th Floor, Pembroke, Bermuda HM 08
- Form of organization:* A body corporate incorporated pursuant to The Bermuda Stock Exchange Act 1992.
- Name of state, statute under which organized and date of incorporation:* Bermuda, The Bermuda Stock Exchange Company Act 1992, on March 10, 1993.
- Brief description of nature and extent of affiliation:* Miami International Holdings, Inc., which is the applicant's 100% owner, is the owner of 100% of the outstanding shares of The Bermuda Stock Exchange ("BSX").
- Brief description of business or functions:* Stock Exchange located in Pembroke, Bermuda.
- A copy of the constitution:* Not applicable.
- A copy of the articles of incorporation or association including all amendments:* The Memorandum of Association dated March 10, 1993, is attached.
- A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated Bye-Laws dated July 21, 2003, are attached.
- The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of The Bermuda Stock Exchange

Name	Title
Gregory A. Wojciechowski	President & Chief Executive Officer
Gregory A. Wojciechowski	Secretary

Name	Title
Ailish Byrne	Chief Compliance Officer
Jacintha Pogson-Hughes	Chief Administration Officer

Council (Directors) of The Bermuda Stock Exchange

Council
Thomas P. Gallagher (Chair)
David Brown (Deputy Chair)
Jeff Conyers
Marianne Deane
Kurt M. Eckert
Caroline Kennedy
Mark Massad
Michael Neff
Robert D. Prunetti
Cynthia Schwarzkopf
Murray Stahl
Gregory A. Wojciechowski

Committees of The Bermuda Stock Exchange

Business Development Committee
Jeff Conyers
Michael Neff
Gregory A. Wojciechowski

Compensation Committee
Thomas P. Gallagher
David Brown
Jeff Conyers
Michael Neff

Executive Management Committee
Thomas P. Gallagher
David Brown
Jeff Conyers
Michael Neff

Listing Committee
Dudley Cottingham
Sharon Beesley
Miguel DaPonte
Gregory A. Wojciechowski
Gavin Woods

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

I. BSD NOMINEE LIMITED

1. *Name:* BSD Nominee Limited
Address: 110 Pitts Bay Road, 4th Floor, Pembroke, Bermuda HM 08
2. *Form of organization:* A body corporate incorporated pursuant to Bermuda, The Companies Act 1981.
3. *Name of state, statute under which organized and date of incorporation:* Organized in Bermuda under The Companies Act 1981 on October 24, 2001. Registered in Bermuda under Section 14 of The Companies Act 1981 on November 1, 2001.
4. *Brief description of nature and extent of affiliation:* Miami International Holdings, Inc., which is the applicant's 100% owner, is the owner of 100% of the outstanding shares of The Bermuda Stock Exchange ("BSX"). BSX is the owner of 100% of the outstanding shares of BSD Nominee Limited.
5. *Brief description of business or functions:* To be the legal owner of shares held for the benefit of account holders of the Bermuda Securities Depository of BSX and to provide nominee services in relation to such shares.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Memorandum of Association dated October 24, 2001, and related documents is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* Not applicable.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of BSD Nominee Limited:

Name	Title
Gregory A. Wojciechowski	Secretary

Council (Directors) of BSD Nominee Limited

Council
Gregory A. Wojciechowski (Chair)
Ailish Byrne (Deputy Chair)

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

J. M 402 HOLDINGS, LLC

- 1. *Name:* M 402 Holdings, LLC
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
- 2. *Form of organization:* Limited Liability Company.
- 3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on June 27, 2020.
- 4. *Brief description of nature and extent of affiliation:* Miami International Holdings, Inc. is the sole member and owner of MIAX Global Derivatives, LLC, which in turn is the sole member and owner of M 402 Holdings, LLC ("M 402"). MIAX Futures Exchange, LLC ("MIAX Futures") is a wholly-owned subsidiary of M 402.
- 5. *Brief description of business or functions:* M 402 is a holding company for the equity and voting securities of MIAX Futures.
- 6. *A copy of the constitution:* Not applicable.
- 7. *A copy of the articles of incorporation or association including all amendments:* The Certificate of Formation dated July 27, 2020 is attached.
- 8. *A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated Limited Liability Company Agreement dated June 4, 2024 and Amended and Restated By-Laws dated June 4, 2024 are attached.
- 9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of M 402 Holdings, LLC

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer

Directors of M 402 Holdings, LLC

Directors
Thomas P. Gallagher

- 10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

K. MIAX FUTURES EXCHANGE, LLC

1. *Name:* MIAX Futures Exchange, LLC (formerly Minneapolis Grain Exchange, LLC)
Address: 400 S 4th St, Minneapolis, MN 55415
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware General Corporation Law (8 Del. C. § 1-101, et seq.), on April 15, 2010; converted to an LLC (Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.)), on December 4, 2020.
4. *Brief description of nature and extent of affiliation:* Miami International Holdings, Inc. is the sole member and owner of MIAX Global Derivatives, LLC, which in turn is the sole member and owner of M 402 Holdings, LLC, which in turn is the sole member and owner of 100% of the equity and voting securities of MIAX Futures Exchange, LLC (“MIAX Futures”).
5. *Brief description of business or functions:* MIAX Futures is a designated contract market and derivatives clearing organization that operates under the regulatory oversight of the Commodity Futures Trading Commission pursuant to Section 5 of the Commodity Exchange Act 7 U.S.C. §7.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Restated Certificate of Formation dated October 3, 2024 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated Limited Liability Company Agreement dated October 1, 2024 and Amended and Restated Bylaws dated June 29, 2025 are attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of MIAX Futures Exchange, LLC

Name	Title
Troy McDonald Kane	President
Jacob R. Fedje	Vice President – Head of Clearing and Chief Risk Officer
Lindsay R. Hopkins	Vice President – Chief Compliance Officer, Senior Counsel, Corporate Secretary
Joshua C. Markou	Chief Financial Officer & Treasurer
Ethan Ongstad	Vice President – Futures Business Strategy and Chief of Staff
Peter D. Sparby	Vice President – Chief Regulatory Officer

Directors of MIAX Futures Exchange, LLC

Directors
Thomas P. Gallagher (Chair)
De’Ana H. Dow
Michael V. Dunn
Kurt M. Eckert
David S. Fleming

Bradley Griffith
William V. Looney, Jr.
Kenneth Lozier
Christopher T. Matzdorf
Kerry L. Melius
Jill E. Sommers
Murray Stahl

Standing Committees of MIAX Futures Exchange, LLC

Executive Committee
Thomas P. Gallagher (Chair)
De'Ana H. Dow
Bradley Griffith
Kenneth W. Lozier
Kerry L. Melius

Audit Committee
Kurt M. Eckert (Chair)
De'Ana H. Dow
Michael V. Dunn
Bradley Griffith
Kenneth W. Lozier

Regulatory Oversight Committee
De'Ana H. Dow (Chair)
Michael V. Dunn
Kurt M. Eckert
Bradley Griffith
Jill E. Sommers

Risk Committee
Bradley Griffith (Chair)
De'Ana H. Dow
Kurt M. Eckert
Kenneth W. Lozier
Jill E. Sommers

Nominations Committee
Bradley Griffith (Chair)
Thomas P. Gallagher
Kenneth W. Lozier

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

L. MGEX REAL ESTATE HOLDINGS, LLC

- 1. *Name:* MGEX Real Estate Holdings, LLC
Address: 400 S 4th St, Minneapolis, MN 55415
- 2. *Form of organization:* Limited Liability Company.
- 3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on February 26, 2024.
- 4. *Brief description of nature and extent of affiliation:* MGEX Real Estate Holdings, LLC is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
- 5. *Brief description of business or functions:* MGEX Real Estate Holdings, LLC is a holding company for real estate.
- 6. *A copy of the constitution:* Not applicable.
- 7. *A copy of the articles of incorporation or association including all amendments:* The Certificate of Formation dated February 26, 2024 is attached.
- 8. *A copy of existing by-laws or corresponding rules or instruments:* The Limited Liability Company Agreement dated March 19, 2024 is attached.
- 9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of MGEX Real Estate Holdings, LLC

Name	Title
Lance Emmons	Executive Vice President – Chief Financial Officer
Barbara Comly	Secretary
Ethan Ongstad	Vice President – Futures Business Strategy and Chief of Staff
Blake Tiedeman	Assistant Vice President – Real Estate Operations

Directors of MGEX Real Estate Holdings, LLC

Directors
Thomas P. Gallagher

- 10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

M. MIAX GLOBAL, LLC

- 1. *Name:* MIAX Global, LLC
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
- 2. *Form of organization:* Limited Liability Company.

3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on June 30, 2015.
4. *Brief description of nature and extent of affiliation:* MIAX Global, LLC ("MIAX Global") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* MIAX Global focuses on the company's trading, technology and other projects primarily based outside the United States.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Amended and Restated Certificate of Formation dated June 25, 2021 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated Limited Liability Company Agreement dated June 25, 2021 is attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of MIAX Global, LLC

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Douglas M. Schafer Jr.	Chief Information Officer and Executive Vice President
Lance Emmons	Executive Vice President and Chief Financial Officer
Gregory A. Wojciechowski	President

Directors of MIAX Global, LLC

Directors
Thomas P. Gallagher

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

N. MIAX PRODUCTS, LLC

1. *Name:* MIAX Products, LLC
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Illinois, Illinois Limited Liability Company Act, 805 ILCS 180, on January 25, 2019.
4. *Brief description of nature and extent of affiliation:* MIAX Products, LLC ("MIAX Products") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.

5. *Brief description of business or functions:* Development of financial products.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Restated Articles of Organization dated October 5, 2021 are attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated Limited Liability Company Agreement dated October 5, 2021 is attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of MIAX Products, LLC

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Douglas M. Schafer Jr.	Chief Information Officer and Executive Vice President

Directors of MIAX Products, LLC

Directors
Thomas P. Gallagher

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

O. DORMAN TRADING, LLC

1. *Name:* Dorman Trading, LLC
Address: 141 W. Jackson Boulevard, Suite 1900, Chicago, Illinois 60604
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Illinois, Illinois Limited Liability Company Act, 805 ILCS 180, on June 18, 2015.
4. *Brief description of nature and extent of affiliation:* Dorman Trading, LLC (“Dorman Trading”) is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
5. *Brief description of business or functions:* Dorman Trading is a full-service futures commission merchant (FCM) providing execution and clearing services for introducing brokers, retail customers, institutional clients and professional traders on a number of futures exchanges.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Articles of Organization dated June 18, 2015 are attached.

8. *A copy of existing by-laws or corresponding rules or instruments:* The Fourth Amended and Restated Operating Agreement and Bylaws dated October 19, 2022 are attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of Dorman Trading, LLC

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Daniel P. Dorman	Senior Vice President, Chief Operating Officer and Assistant Secretary
David Dorman	Senior Vice President, Operations
Marie Schmucker	Chief Financial Officer
Michael Higgins	Chief Compliance Officer
Mark Robertson	Vice President, Clearing and Floor Operations
Brian Gaffud	Vice President, Director of Business Development
Michael Stanton	Vice President, Business Development
Wesley Chiu	Vice President – Finance
Barbara J. Comly	Secretary

Directors of Dorman Trading, LLC

Directors
Thomas P. Gallagher (Chair)
Robert D. Prunetti
Brian Duggan

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

P. M 7 HOLDINGS, LLC

1. *Name:* M 7 Holdings, LLC
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on November 15, 2022.
4. *Brief description of nature and extent of affiliation:* Miami International Holdings, Inc. is the sole member and owner of MIAX Global Derivatives, LLC, which in turn is the sole member and owner of M 7 Holdings, LLC ("M 7"). LedgerX LLC d/b/a MIAX Derivatives Exchange ("MIAXdx") is a wholly-owned subsidiary of M 7.
5. *Brief description of business or functions:* M 7 is a holding company for MIAX Derivatives Exchange.
6. *A copy of the constitution:* Not applicable.

7. *A copy of the articles of incorporation or association including all amendments:* The Certificate of Formation dated November 15, 2022 is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Amended and Restated Limited Liability Company Agreement dated June 4, 2024 and Amended and Restated By-Laws dated June 4, 2024 are attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of M 7 Holdings, LLC

Name	Title
Thomas P. Gallagher	Chairman and Chief Executive Officer
Barbara Comly	Executive Vice President, General Counsel and Corporate Secretary
Lance Emmons	Executive Vice President and Chief Financial Officer

Directors of M 7 Holdings, LLC

Directors
Thomas P. Gallagher

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

Q. LEDGERX LLC D/B/A MIAX DERIVATIVES EXCHANGE

1. *Name:* LedgerX LLC d/b/a MIAX Derivatives Exchange (“MIAXdx”) *Address:* 7 Roszel Road, Suite 1A, Princeton, NJ 08540
2. *Form of organization:* Limited Liability Company.
3. *Name of state, statute under which organized and date of incorporation:* Delaware, Delaware Limited Liability Company Act (6 Del. C. § 18-101, et seq.), on April 8, 2014.
4. *Brief description of nature and extent of affiliation:* Miami International Holdings, Inc. is the sole member and owner of MIAX Global Derivatives, LLC, which in turn is the sole member and owner of M 7 Holdings, LLC, which in turn is the sole member and owner of 100% of the equity and voting securities of MIAXdx.
5. *Brief description of business or functions:* MIAXdx is a swap execution facility, derivatives clearing organization and designated contract market regulated by the Commodity Futures Trading Commission.
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Certificate of Formation dated April 8, 2014, is attached.

8. *A copy of existing by-laws or corresponding rules or instruments: The Second Amended and Restated Limited Liability Company Agreement dated July 31, 2023, is attached.*
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of MIAX Derivatives Exchange

Name	Title
Zachary Dexter	Chief Executive Officer; duties of Chief Technology Officer on a temporary basis
Josh Markou	Chief Financial Officer
Brian Mulherin	General Counsel
Caroline Arnold	Chief Compliance Officer and Chief Regulatory Officer on an interim basis
James Outen	Chief Risk Officer and Chief Economist
Ryan Scott Mendel	Chief Information Officer
Barbara J. Comly	Corporate Secretary

Directors of MIAX Derivatives Exchange

Directors
Thomas P. Gallagher (Chair)
Bryan Bishop
Lindsay L. Burbage
Zachary Dexter
Kurt M. Eckert
Jerome Kemp
Kenneth Lozier
Lisa Moore
Robert D. Prunetti
Jill Sommers

Standing Committees of MIAX Derivatives Exchange

Regulatory Oversight Committee
Lindsay L. Burbage
Jerome Kemp
Jill Sommers

Risk Management Committee
Zachary Dexter
Kurt M. Eckert
Thomas P. Gallagher
Kenneth Lozier
Lisa Moore

Participant Committee
Lindsay L. Burbage
Zachary Dexter
Lisa Moore

Nominating Committee
Lindsay L. Burbage
Kurt M. Eckert
Robert D. Prunetti
Jill Sommers
Kenneth Lozier

Disciplinary Panel
Bryan Bishop
Jerome Kemp
Jill Sommers

Appeals Committee
Kurt M. Eckert
Kenneth Lozier
Lisa Moore

Audit Committee
Kurt M. Eckert
Lisa Moore
Robert D. Prunetti

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

R. MIH EAST HOLDINGS, LIMITED

- Name:* MIH East Holdings, Limited
Address: 7 Roszel Road, Suite 1A, Princeton, New Jersey 08540
- Form of organization:* Private Limited Company.
- Name of state, statute under which organized and date of incorporation:* England and Wales, Companies Act 2006, on March 20, 2023.
- Brief description of nature and extent of affiliation:* MIH East Holdings, Limited ("MIH East") is wholly-owned by Miami International Holdings, Inc., which is the applicant's 100% owner.
- Brief description of business or functions:* MIH East is a holding company that holds all of the issued and outstanding shares of The International Stock Exchange Group Limited ("TISEG"), a company incorporated in Guernsey, which is the sole owner of The International Stock Exchange Authority Limited ("TISEA"), a company incorporated in Guernsey.
- A copy of the constitution:* Not applicable.

7. *A copy of the articles of incorporation or association including all amendments:* The Certificate of Incorporation dated March 20, 2023, is attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* The Articles of Association are attached.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of MIH East Holdings, Limited

Name	Title
Thomas P. Gallagher	Chief Executive Officer
Lance Emmons	Chief Financial Officer

Directors of MIH East Holdings, Limited

Directors
Thomas P. Gallagher
Lance Emmons

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

S. THE INTERNATIONAL STOCK EXCHANGE GROUP LIMITED

1. *Name:* The International Stock Exchange Group Limited
Address: Helvetia Court, Block B, 3rd Floor, Les Echelons, St Peter Port, Guernsey, GY1 1AR
2. *Form of organization:* A company limited by shares incorporated pursuant to the Companies (Guernsey) Law, 2008 (as amended).
3. *Name of state, statute under which organized and date of incorporation:* Guernsey, the Companies (Guernsey) Law, 2008 (as amended), on November 14, 2013 with the name The Channel Islands Securities Exchange Limited; Certificate of Change of Name to The International Stock Exchange Group Limited on March 6, 2017.
4. *Brief description of nature and extent of affiliation:* Miami International Holdings, Inc. is the sole member and owner of MIH East Holdings, Limited, which in turn is the sole owner of The International Stock Exchange Group Limited ("TISEG") as of June 5, 2025. TISEG is the sole owner of The International Stock Exchange Authority Limited ("TISEA").
5. *Brief description of business or functions:* TISEG is a holding company that holds all of the issued and outstanding shares of TISEA. TISEG, via its subsidiary, TISEA, provides financial markets and securities services to public and private companies. TISEA is licensed by the Guernsey Financial Services Commission to operate an investment exchange, known as The International Stock Exchange ("TISE"). TISE's Qualified Investor Bond Market ("QIBM") is a leading market in Europe for listing high yield bonds, private equity debt and has a growing reputation for listing securitization transactions. TISE offers trading in domestic equities, UK Real Estate Investment

Trusts (“REITs”) and hosts a sustainable finance segment, TISE Sustainable. TISEG is headquartered in Guernsey, Channel Islands.

6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Certificate of Incorporation dated November 14, 2013, Memorandum of Incorporation dated November 14, 2013, Certificate of Name Change dated March 6, 2017, and Articles of Incorporation dated April 24, 2025, are attached.
8. *A copy of existing by-laws or corresponding rules or instruments:* Not applicable.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of The International Stock Exchange Group Limited

Name	Title
Cees Vermaas	Chief Executive Officer and Director
Robbie Andrade	Chief Operating Officer
Andrew Watchman	Chief Financial Officer and Director
Emily Humphry	Chief Governance Officer and Company Secretary

Directors of The International Stock Exchange Group Limited

Directors
Thomas P. Gallagher (Chair)
Kurt M. Eckert
Caroline Mackenzie Kennedy
Cees Vermaas (Executive Director)
Andrew Watchman (Executive Director)
Alexander Anderson Whamond

Committees of The International Stock Exchange Group Limited

There are four authorized committees of TISEG, with no active members since the closing of the TISEG acquisition on June 5, 2025: Audit Committee, Nominations Committee, Remuneration Committee and Risk Committee.

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:* Not applicable.

T. THE INTERNATIONAL STOCK EXCHANGE AUTHORITY LIMITED

1. *Name:* The International Stock Exchange Authority Limited
Address: Helvetia Court, Block B, 3rd Floor, Les Echelons, St Peter Port, Guernsey, GY1 1AR
2. *Form of organization:* A company limited by shares incorporated pursuant to the Companies (Guernsey) Law, 2008 (as amended).

3. *Name of state, statute under which organized and date of incorporation:* Guernsey, the Companies (Guernsey) Law, 2008 (as amended), on November 14, 2013 with the name The Channel Islands Securities Exchange Authority Limited; Certificate of Change of Name to The International Stock Exchange Authority Limited on April 26, 2017.
4. *Brief description of nature and extent of affiliation:* Miami International Holdings, Inc. is the sole member and owner of MIH East Holdings, Limited, which in turn is the sole owner of The International Stock Exchange Group Limited ("TISEG") as of June 5, 2025. The International Stock Exchange Authority Limited ("TISEA") is a wholly-owned subsidiary of TISEG.
5. *Brief description of business or functions:* TISEA is licensed by the Guernsey Financial Services Commission to operate an investment exchange under the Protection of Investors (Bailiwick of Guernsey) Law, 2020. TISEA acts as the frontline regulator for The International Stock Exchange ("TISE").
6. *A copy of the constitution:* Not applicable.
7. *A copy of the articles of incorporation or association including all amendments:* The Certificate of Incorporation dated November 14, 2013, Certificate of Change of Name dated April 26, 2017, and Memorandum and Articles of Incorporation dated November 14, 2013 are attached
8. *A copy of existing by-laws or corresponding rules or instruments:* Not applicable.
9. *The name and title of the present officers, governors, members of all standing committees, or persons performing similar functions:*

Officers of The International Stock Exchange Authority Limited

Name	Title
Cameron Craine	Head of Listings and Director
Jonathan Richards	Head of Market Regulation and Director
Emily Humphry	Chief Governance Officer and Company Secretary

Directors of The International Stock Exchange Authority Limited

Directors
Nicholas Bayley (Chair)
Philip Braun
Cameron Craine (Executive Director)
Jonathan Richards (Executive Director)

Standing Committees of The International Stock Exchange Authority Limited

Listing and Membership Committee
Cameron Craine
Jonathan Richards
Adrian D'Arcy
Josalen Manaloto
Petrus Roos

TPM Oversight Committee
Cameron Craine
Jonathan Richards
Adrian D'Arcy
Josalen Manaloto
Petrus Roos

10. *An indication of whether such business or organization ceased to be associated with the applicant during the previous year, and a brief statement of the reasons for termination of the association:*
Not applicable.

**AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
MIAMI INTERNATIONAL HOLDINGS, INC.**


MIAMI INTERNATIONAL HOLDINGS, INC., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), in accordance with the provisions of Section 245 of the General Corporation Law of the State of Delaware, hereby certifies as follows:

1. The Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on November 14, 2007.
2. An Amended and Restated Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on January 22, 2008.
3. An Amended and Restated Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on May 15, 2008.
4. A Certificate of Designation for the Series B Preferred Stock of the Corporation was filed with the Secretary of State of the State of Delaware on May 30, 2008.
5. A Certificate of Designation for the Series A Preferred Stock of the Corporation was filed with the Secretary of State of the State of Delaware on June 4, 2008.
6. A Certificate of Increase of Shares Designated as Series B Preferred Stock of the Corporation was filed with the Secretary of State of the State of Delaware on November 1, 2010.
7. A Certificate of Elimination for the Series A Preferred Stock of the Corporation was filed with the Secretary of State of the State of Delaware on November 1, 2010.
8. A Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on November 9, 2010.
9. An Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on August 31, 2012.
10. An Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on October 16, 2015.
11. This Amended and Restated Certificate of Incorporation of the Corporation amends and restates the Restated Certificate of Incorporation of the Corporation as set forth in Exhibit A attached hereto. This Amended and Restated Certificate of Incorporation of the Corporation was duly adopted in accordance with Section 242 and 245 of the General Corporation Law of the State of Delaware.
12. The text of this Amended and Restated Certificate of Incorporation of the Corporation is set forth in Exhibit A attached hereto and made a part hereof.

State of Delaware
Secretary of State
Division of Corporations
Delivered 03:33 PM 07/15/2025
FILED 03:33 PM 07/15/2025
SR 20253368764 - File Number 4457259

IN WITNESS WHEREOF, Miami International Holdings, Inc. has caused this Amended and Restated Certificate of Incorporation to be executed by its duly authorized officer on this 15th day of July, 2025.

MIAMI INTERNATIONAL HOLDINGS, INC.

By: 

Barbara J. Comly
EVP, General Counsel and Corporate Secretary

Exhibit A

**AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
MIAMI INTERNATIONAL HOLDINGS, INC.**

FIRST: The name of the Corporation is Miami International Holdings, Inc. (hereinafter the "Corporation").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at that address is The Corporation Trust Company.

THIRD: The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware as set forth in Title 8 of the Delaware Code (the "GCL").

FOURTH: A. The total number of shares of stock which the Corporation shall have authority to issue is 625,000,000 shares which are to be divided as follows:

- (i) 400,000,000 shares of voting common stock, par value \$.001 per share designated as "Common Stock";
- (ii) 200,000,000 shares of nonvoting common stock, par value \$.001 per share designated as "Nonvoting Common Stock"; and
- (iii) 25,000,000 shares of preferred stock, par value \$.001 per share designated as "Preferred Stock".

Upon the filing and effectiveness of this Amended and Restated Certificate of Incorporation (the "Effective Time"), each two (2) shares of Common Stock, Nonvoting Common Stock and Series B Preferred Stock (as defined below) outstanding and held of record by each stockholder of the Corporation (including treasury shares) immediately prior to the Effective Time shall, automatically and without any further action on the part of the Corporation or the respective holders thereof, be reclassified and combined into one (1) validly issued, fully paid and non-assessable share of Common Stock, Nonvoting Common Stock or Series B Preferred Stock, as applicable (the "Reverse Stock Split"). No fractional shares shall be issued in connection with the Reverse Stock Split. Instead, any fractional shares that would otherwise be issuable as a result of the Reverse Stock Split will be rounded up to the nearest whole share, and adjustments to outstanding awards under the Corporation's equity incentive plans shall be made in accordance with the terms and conditions of such plans.

Each certificate that immediately prior to the Effective Time represented shares of Common Stock, Nonvoting Common Stock or Series B Preferred Stock ("Old Certificates"), shall thereafter represent that number of shares into which the shares of Common Stock, Nonvoting Common Stock or Series B Preferred Stock represented by the Old Certificate shall have been

combined, subject to the rounding of fractional share interests as described above. The authorized number of shares, and par value per share of Common Stock, Nonvoting Common Stock, Preferred Stock and Series B Preferred Stock shall not be affected by the Reverse Stock Split.

Except as set forth in this Article Fourth, the Common Stock and the Nonvoting Common Stock (together herein, the “Common Shares”) shall have the same rights and privileges and shall rank equally, share ratably and be identical in all respects as to all corporate matters.

(a) **Voting**. Except as may be provided in this Amended and Restated Certificate of Incorporation or as required by law, the Common Stock shall have voting rights in the election of directors and on all other matters presented to stockholders, with each holder of Common Stock being entitled to one vote for each share of Common Stock held of record by such holder on such matters. The Nonvoting Common Stock shall have no voting rights other than such rights as may be required by the first sentence of Section 242(b)(2) of the GCL or any similar provision hereafter enacted; provided, that an amendment of this Amended and Restated Certificate of Incorporation to increase or decrease the number of authorized shares of Nonvoting Common Stock (but not below the number of shares thereof then outstanding) may be adopted by resolution adopted by the Board of Directors of the Corporation and approved by the affirmative vote of the holders of a majority of the voting power of all outstanding shares of Common Stock of the Corporation and all other outstanding shares of stock of the Corporation entitled to vote thereon irrespective of the provisions of Section 242(b)(2) of the GCL or any similar provision hereafter enacted, with such outstanding shares of Common Stock and other stock considered for this purpose as a single class, and no vote of the holders of any shares of Nonvoting Common Stock, voting separately as a class, shall be required therefor.

(b) **Dividends**. Subject to the rights of the holders of any series of Preferred Stock, holders of Common Stock and holders of Nonvoting Common Stock shall be entitled to receive such dividends and distributions (whether payable in cash or otherwise) as may be declared on the Common Shares by the Board of Directors of the Corporation from time to time out of assets or funds of the Corporation legally available therefore; provided, that the Board of Directors of the Corporation shall declare no dividend, and no dividend shall be paid, with respect to any outstanding share of Common Stock or Nonvoting Common Stock, whether in cash or otherwise (including any dividend in shares of Common Stock on or with respect to shares of Common Stock or any dividend in shares of Nonvoting Common Stock on or with respect to shares of Nonvoting Common Stock (collectively, “Stock Dividends”)), unless, simultaneously, the same dividend is declared or paid with respect to each share of Common Stock and Nonvoting Common Stock. The declaration of Stock Dividends shall be subject to the provisions set forth in Article Ninth below and if the Corporation declares any Stock Dividends and such declaration would violate the provisions of Article Ninth with respect to any stockholder, then the Corporation shall only issue to such stockholder a certificate or certificates for the maximum amount of Stock Dividends that may be issued that would not violate the provisions of Article Ninth. The Corporation shall issue any Stock Dividends in full to any stockholder where such declaration would not violate the provisions of Article Ninth. If a Stock Dividend is declared or paid with respect to one class, then a Stock Dividend shall likewise be declared or paid with respect to the other class and shall consist of shares of such other class in a number that bears the same relationship to the total number of shares of such other class, issued and outstanding immediately prior to the payment of such

dividend, as the number of shares comprising the Stock Dividend with respect to the first-referenced class bears to the total number of shares of such first-referenced class, issued and outstanding immediately prior to the payment of such dividend. Stock Dividends with respect to Common Stock may be paid only with shares of Common Stock. Stock Dividends with respect to Nonvoting Common Stock may be paid only with shares of Nonvoting Common Stock. Notwithstanding the foregoing, in the case of any dividend in the form of capital stock of a subsidiary of the Corporation, the capital stock of the subsidiary distributed to holders of Common Stock shall be identical to the capital stock of the subsidiary distributed to holders of Nonvoting Common Stock, except that the capital stock distributed to holders of Common Stock may have full or any other voting rights and the capital stock distributed to holders of Nonvoting Common Stock shall be non-voting to the same extent as the Nonvoting Common Stock is non-voting.

(c) **Subdivisions, Combinations and Mergers.** If the Corporation shall in any manner split, subdivide or combine the outstanding shares of Common Stock or the outstanding shares of Nonvoting Common Stock, the outstanding shares of the other such class of the Common Shares shall likewise be split, subdivided or combined in the same manner proportionately and on the same basis per share. In the event of any merger, statutory share exchange, consolidation or similar form of corporate transaction involving the Corporation (whether or not the Corporation is the surviving entity), the holders of Common Stock and the holders of Nonvoting Common Stock shall be entitled to receive the same per share consideration, if any, except that any securities received by holders of Common Stock in consideration of such stock may have full or any other voting rights and any securities received by holders of Nonvoting Common Stock in consideration of such stock shall be non-voting to the same extent as the Nonvoting Common Stock is non-voting.

(d) **Rights on Liquidation.** Subject to the rights of the holders of any series of Preferred Stock, in the event of any liquidation, dissolution or winding-up of the Corporation (whether voluntary or involuntary), the assets of the Corporation available for distribution to stockholders shall be distributed in equal amounts per share to the holders of Common Stock and the holders of Nonvoting Common Stock, as if such classes constituted a single class. For purposes of this subsection (d), a merger, statutory share exchange, consolidation or similar corporate transaction involving the Corporation (whether or not the Corporation is the surviving entity), or the sale, transfer or lease by the Corporation of all or substantially all its assets, shall not constitute or be deemed a liquidation, dissolution or winding-up of the Corporation.

(e) **Conversion of Nonvoting Common Stock.**

(i) **Optional Conversion.** Subject to the provisions set forth in Article Ninth below, each one share of the Nonvoting Common Stock will be convertible at the option of the holder thereof into one fully paid and non-assessable share of Common Stock, subject to adjustment as provided in this Article Fourth. If any stockholder purports to convert any shares of Nonvoting Common Stock that would violate the provisions of Article Ninth, then the Corporation shall only issue to such stockholder a certificate or certificates for the maximum number of shares of Common Stock that may be issued that would not violate the provisions of Article Ninth.

(ii) **Mechanics of Optional Conversion.** The holder of any certificate for Nonvoting Common Stock shall be entitled to request conversion of all or part of its Nonvoting Common Stock at any time by delivering a written notice to the attention of the Secretary or Treasurer of the Corporation at the Corporation's principal place of business of its desire to convert its Nonvoting Common Stock and receive a replacement certificate or certificates therefor, specifying the number of shares of Nonvoting Common Stock to be so converted and the holder's calculation of the Nonvoting Conversion Rate. In the event of any disagreement between the Corporation and the holder as to the correct Nonvoting Conversion Rate, the Nonvoting Conversion Rate will be finally determined by an investment banking or brokerage firm with no material prior or current relationship with the Corporation or any of its subsidiaries selected by the Board in good faith, the fees and expenses of which will be paid by the Corporation. The Corporation will, promptly upon receipt of all certificates representing Nonvoting Common Stock of such holder that are to be converted, issue a certificate or certificates registering the appropriate number of shares of Common Stock to such holder. Upon optional conversion as set forth in Subsection (e)(i), the shares of Nonvoting Common Stock so converted shall be eliminated, and thereafter such shares of Nonvoting Common Stock shall become and be known as shares of "Common Stock" without further action on the part of the holder thereof. "Nonvoting Conversion Rate" means the number of shares of Common Stock into which each share of Nonvoting Common Stock may be converted.

(iii) **Reservation of Stock Issuable Upon Conversion.** The Corporation will at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Nonvoting Common Stock, such number of its shares of Common Stock as will from time to time be sufficient to effect the conversion of all then-outstanding shares of the Nonvoting Common Stock; and if at any time the number of authorized but unissued shares of Common Stock will not be sufficient to effect the conversion of all then-outstanding shares of the Nonvoting Common Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as will be sufficient for such purpose.

B. The Board of Directors of the Corporation is authorized, subject to limitations prescribed by law and the provisions of this Article Fourth, to provide for the issuance from time to time in one or more series of any number of the shares of Preferred Stock, and, by filing a certificate pursuant to the GCL, to establish the number of shares to be included in each such series, and to fix the designation, relative rights, preferences, qualifications and limitations of the shares of each such series.

The authority of the Board of Directors with respect to each such series shall include, but not be limited to, determination of the following:

(a) The number of shares constituting that series and distinctive designation of that series;

(b) The dividend rate on the shares of that series, whether dividends shall be cumulative, and, if so, from which date or dates, and whether they shall be payable in preference to, or in another relation to, the dividends payable on any other class or classes or series of stock;

(c) Whether that series shall have voting rights, in addition to the voting rights provided by law, and, if so, the terms of such voting rights;

(d) Whether that series shall have conversion privileges, and, if so, the terms and conditions of such conversion, including provision for adjustment of the conversion rate in such events as the Board of Directors shall determine;

(e) Whether or not the shares of that series shall be redeemable, and, if so, the terms and conditions of such redemption, including the manner of selecting shares for redemption if less than all shares are to be redeemed, the date or dates upon or after which they shall be redeemable, and the amount per share payable in case of redemption, which amount may vary under different conditions and at different redemption dates;

(f) Whether that series shall be entitled to the benefit of a sinking fund to be applied to the purchase or redemption of shares of that series, and, if so, the terms and amounts of such sinking fund;

(g) The rights of the shares of that series in the event of a voluntary or involuntary liquidation, dissolution or winding up of the Corporation and whether such rights shall be in preference to, or in another relation to, the comparable rights of any other class or classes or series of stock; and

(h) Any other relative rights, preferences and limitations of that series.

Dividends on outstanding shares of Preferred Stock shall be paid or declared and set apart for payment before any dividends shall be paid or declared and set apart for payment on the shares of Common Stock or Nonvoting Common Stock with respect to the same dividend period.

If upon any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the assets available for distribution to holders of shares of Preferred Stock of all series shall be insufficient to pay such holders the full preferential amount to which they are entitled, then such assets shall be distributed ratably among the shares of all series of Preferred Stock in accordance with the respective preferential amounts (including unpaid cumulative dividends, if any) payable with respect thereto.

C. The first series of Preferred Stock designated as "Series A Preferred Stock" was eliminated by the filing of a Certificate of Elimination with respect to the Series A Preferred Stock with the Secretary of State of the State of Delaware on November 1, 2010.

D. The second series of Preferred Stock was designated as "Series B Preferred Stock" by the filing of a Certificate of Designation with respect to the Series B Preferred Stock with the Secretary of State of the State of Delaware on May 30, 2008. The number of shares designated

was increased by the filing of a Certificate of Increase with respect to the Series B Preferred Stock with the Secretary of State of the State of Delaware on November 1, 2010. The designation, number of shares designated and the powers, preferences and relative participating, optional and other special rights and the qualifications, limitations and restrictions thereof are as follows:

SERIES B PREFERRED STOCK

1. **Certain Defined Terms, etc.** In addition to the terms defined elsewhere herein, certain capitalized terms used in this Article Fourth Section D have the meanings given to them in Article Fourth, Section D, Section 10. References in this Article Fourth Section D to Sections are, unless otherwise stated, references to Sections herein.

2. **Designation.** Of the 25,000,000 shares of Preferred Stock, par value \$.001 per share, that the Corporation is authorized to issue, there are hereby designated Ten Million (10,000,000) as “Series B Preferred Stock” having the powers, preferences and relative participating, optional and other special rights and the qualifications, limitations and restrictions set forth in this Article Fourth Section D (the “Series B Preferred”).

3. **Dividends and Distributions.** The Series B Preferred shall be entitled to receive dividends and distributions, at the same time and in the same manner as the Common Stock, and in an amount per share equal to the amount per share that the shares of Common Stock into which such Series B Preferred are convertible would have been entitled to receive if such Series B Preferred had been so converted into Common Stock as of the record date established for determining holders entitled to dividends, or if no such record date is established, as of the time of declaration of any such dividend or distribution.

4. **Voting Rights.** (a) The Series B Preferred will have the right to vote or consent in writing as set forth in this Section 4.

(b) As long as any shares of Series B Preferred are outstanding, the affirmative vote or consent of the holders of two-thirds of the then-outstanding shares of Series B Preferred, voting as a separate class, will be required in order for the Corporation to:

(i) amend, alter or repeal, whether by merger, consolidation or otherwise, the terms of this Article Fourth Section D or any other provision of the Charter or Bylaws of the Corporation (the “Bylaws”), in any way that adversely affects any of the powers, designations, preferences and relative, participating, optional and other special rights of the Series B Preferred, and the qualifications, limitations or restrictions thereof;

(ii) subdivide or otherwise change shares of Series B Preferred into a different number of shares whether in a merger, consolidation, combination, recapitalization, reorganization or otherwise (whether or not any provision of Section 6 is applicable to such transaction); or

(iii) issue any shares of Series B Preferred other than in accordance with this Article Fourth Section D.

(c) The Series B Preferred shall have no right to vote or consent on any matters submitted to a vote of the Common Stock, except as otherwise provided by the GCL.

(d) Notwithstanding any other provision of the Charter or Bylaws, the holders of a majority, or greater number if so required by the Charter or the GCL, of the then-outstanding Series B Preferred may consent in writing to any matter for which a class vote is contemplated, which written consent when so executed by the holders of a majority, or such greater number required, of the then-outstanding Series B Preferred will be deemed, subject to applicable Delaware law, to satisfy the applicable voting requirements.

5. **Reacquired Shares.** Any shares of Series B Preferred that are converted, purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and canceled promptly after the acquisition thereof. None of such shares of Series B Preferred shall be reissued by the Corporation.

6. **Liquidation, Dissolution or Winding Up.** Upon any liquidation, dissolution or winding up of the Corporation, the holders of shares of Series B Preferred shall be entitled to receive the same distribution paid to the holders of Common Stock, on an as-converted basis. Neither a consolidation or merger of the Corporation with another corporation or other legal entity, nor a sale or transfer of all or part of the Corporation's assets for cash, securities or other property will be considered a liquidation, dissolution or winding up of the Corporation for purposes of this Section 6.

7. **Conversion.** (a) **Optional Conversion.** Subject to the provisions set forth in Article Ninth, each one share of the Series B Preferred will be convertible at the option of the holder thereof into one fully paid and non-assessable share of Common Stock, subject to adjustment as described below, upon a Fundamental Transaction. If any stockholder purports to convert any shares of Series B Preferred that would violate the provisions of Article Ninth, then the Corporation shall only issue to such stockholder a certificate or certificates for the maximum number of shares of Common Stock that may be issued that would not violate the provisions of Article Ninth. A "Fundamental Transaction" shall mean a Public Company Event, a merger or consolidation of the Corporation with or into another corporation or other legal entity, or the sale of all or substantially all of the Corporation's properties and assets to any other Person which is effected so that holders of Common Stock are entitled to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Common Stock. For purposes of this Article Fourth Section D, "A Public Company Event" means an initial firm commitment underwritten offering to the public of the Company's Common Stock pursuant to a registration statement under the Securities Act of 1933, as amended or the registration of the Company's Common Stock under the Securities Exchange Act of 1934, as amended (the "Act").

(b) **Mechanics of Optional Conversion.** The holder of any certificate for Series B Preferred shall be entitled to request conversion of all or part of its Series B Preferred at any time as provided in Section 7(a), by delivering a written notice to the attention of the Secretary or Treasurer of the Corporation at the Corporation's principal place of business of its desire to convert its Series B Preferred and receive a replacement certificate or certificates therefor, specifying the number of shares of Series B Preferred to be so converted and the holder's calculation of the Conversion Rate. In the event of any disagreement between the Corporation and the holder as to the correct Conversion Rate, the Conversion Rate will be finally determined by an investment banking or brokerage firm with no material prior or current relationship with the Corporation or any of its subsidiaries selected by the Board in good faith, the fees and expenses of which will be paid by the Corporation. The Corporation will, promptly upon receipt of all certificates representing Series B Preferred of such holder that are to be converted, issue a certificate or certificates registering the appropriate number of shares of Common Stock to such holder. Upon optional conversion as set forth in Section 7 (a), the shares of Series B Preferred so converted shall be eliminated, and thereafter such shares of Series B Preferred shall become and be known as shares of "Common Stock" without further action on the part of the holder thereof.

(c) **Adjustment for Subdivisions or Combinations of Common Stock.** In the event that the Corporation at any time or from time to time after the issuance of the Series B Preferred effects a subdivision, dividend payable in shares of capital stock, combination or other similar transaction of its outstanding Common Stock into a greater or lesser number of shares, then and in each such event the Conversion Rate will be increased or decreased proportionately.

(d) **Reorganization, Merger, Consolidation or Sale of Assets.** If at any time or from time to time there shall be a capital reorganization of the Common Stock (other than a subdivision, combination, or dividend payable in shares provided for elsewhere in this Section 7) or a merger or consolidation of the Corporation with or into another corporation or other legal entity, or the sale of all or substantially all of the Corporation's properties and assets to any other Person which is effected so that holders of Common Stock are entitled to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Common Stock, then as a part of such capital reorganization, merger, consolidation or sale, proper provision will be made so that each holder of Series B Preferred will thereafter be entitled to receive upon conversion of the Series B Preferred the same number of shares of stock, securities or assets of the Corporation, or of the successor corporation or other legal entity resulting from such merger or consolidation or sale, which such holder would have been entitled to receive on such capital reorganization, merger, consolidation or sale if such holder's Series B Preferred had been converted into Common Stock immediately prior to the record date established for determining holders entitled to such distribution, or if no such record date is established, as of the time of such transaction. In any such case, appropriate adjustment will be made in the application of the provisions of this Section 7(d) with respect to the rights of the holders of the Series B Preferred after the reorganization, merger, consolidation or sale to the end that the provisions of this Section 7(d) (including adjustment of the Conversion Rate then in effect) will be applicable after that event as

nearly equivalent as may be practicable. This provision will apply to successive capital reorganizations, mergers, consolidations or sales.

(e) **No Adjustment.** No adjustment to the Conversion Rate will be made if such adjustment would result in a change in the Conversion Rate of less than 0.001%. Any adjustment of less than 0.001% which is not made will be carried forward and will be made at the time of and together with any subsequent adjustment which, on a cumulative basis, amounts to an adjustment of 0.001% or more in the Conversion Rate.

(f) **Certificate as to Adjustments.** Upon the occurrence of each adjustment or readjustment of the Conversion Rate pursuant to this Section 7, the Corporation at its expense will promptly compute such adjustment or readjustment in accordance with the terms hereof and cause independent public accountants selected by the Corporation to verify such computation and prepare and furnish to each holder of Series B Preferred a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation will, upon the written request at any time of any holder of Series B Preferred, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Rate at that time in effect, and (iii) the amount, if any, of other property which at that time would be received upon the conversion of Series B Preferred.

(g) **Reservation of Stock Issuable Upon Conversion.** The Corporation will at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Series B Preferred, such number of its shares of Common Stock as will from time to time be sufficient to effect the conversion of all then-outstanding shares of the Series B Preferred; and if at any time the number of authorized but unissued shares of Common Stock will not be sufficient to effect the conversion of all then-outstanding shares of the Series B Preferred, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as will be sufficient for such purpose.

8. **Rank.** The Series B Preferred will rank on a parity with the Common Stock as to any distributions or upon liquidation, dissolution or winding up.

9. **Notice to Holders.** Any notice given by the Corporation to holders of record of Series B Preferred will be effective if addressed to such holders at their last addresses as shown on the stock books of the Corporation and deposited in the U.S. mail, sent first-class, and will be conclusively presumed to have been duly given, whether or not the holder of the Series B Preferred receives such notice.

10. **Certain Defined Terms.** In addition to the terms defined elsewhere in this Article Fourth Section D, the following terms will have the following meanings when used herein with initial capital letters:

“Conversion Rate” means the number of shares of Common Stock into which each share of Series B Preferred may be converted; and

“Person” means any individual, firm, corporation or other entity and includes any successor (whether by merger or otherwise) of such entity.

FIFTH: The Corporation is to have perpetual existence.

SIXTH: The following provisions are inserted for the management of the business and the conduct of the affairs of the Corporation, and for further definition, limitation and regulation of the powers of the Corporation and of its directors and stockholders:

(a) The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.

(b) The directors shall have concurrent power with the stockholders to make, alter, amend, change, add to or repeal the By-Laws of the Corporation.

(c) The number of directors of the Corporation shall be as from time to time fixed by, or in the manner provided in, the By-Laws of the Corporation. Election of directors need not be by written ballot unless the By-Laws so provide.

(d) No director shall be personally liable to the Corporation or any of its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the GCL or (iv) for any transaction from which the director derived an improper personal benefit. Any repeal or modification of this Article Sixth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of such repeal or modification with respect to acts or omissions occurring prior to such repeal or modification.

(e) In addition to the powers and authority hereinbefore or by statute expressly conferred upon them, the directors are hereby empowered to exercise all such powers and do all such acts and things as may be exercised or done by the Corporation, subject, nevertheless, to the provisions of the GCL, this Amended and Restated Certificate of Incorporation, and any By-Laws adopted by the stockholders; provided, however, that no By-Laws hereafter adopted by the stockholders shall invalidate any prior act of the directors which would have been valid if such By-Laws had not been adopted.

SEVENTH: Meetings of stockholders may be held within or without the State of Delaware, as the By-Laws may provide. The books of the Corporation may be kept (subject to any provision contained in the GCL) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the By-Laws of the Corporation.

EIGHTH: The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Amended and Restated Certificate of Incorporation, in the manner now

or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation. For so long as this Corporation shall control, directly or indirectly, one or more national securities exchange (each, a "Controlled National Securities Exchange"), including but not limited to Miami International Securities Exchange, LLC, or facility thereof, before any amendment to or repeal of any provision of this Amended and Restated Certificate of Incorporation shall be effective, those changes shall be submitted to the Board of Directors of each Controlled National Securities Exchange and if the same must be filed with or filed with and approved by the United States Securities and Exchange Commission (the "Commission") before the changes may be effective, under Section 19 of the Act and the rules promulgated under that Act by the Commission or otherwise, then the proposed changes to the Amended and Restated Certificate of Incorporation of this Corporation shall not be effective until filed with or filed with and approved by the Commission, as the case may be.

NINTH: In addition to any limitations on the transfer of shares of the Corporation's capital stock set forth in the By-Laws of the Corporation, the following shall apply to the fullest extent permitted by law for so long as this Corporation shall control, directly or indirectly, a Controlled National Securities Exchange, except as provided in clause (b)(ii) below:

(a) **Definitions.** As used in this Article Ninth:

- (i) The term "Person" shall mean a natural person, partnership, corporation, limited liability company, entity, government, or political subdivision, agency or instrumentality of a government;
- (ii) The term "Related Persons" shall mean with respect to any Person:
 - (A) any "affiliate" of such Person (as such term is defined in Rule 12b-2 under the Act);
 - (B) any other Person with which such first Person has any agreement, arrangement or understanding (whether or not in writing) to act together for the purpose of acquiring, voting, holding or disposing of shares of the capital stock of the Corporation;
 - (C) in the case of a Person that is a company, corporation or similar entity, any executive officer (as defined under Rule 3b-7 under the Act) or director of such Person and, in the case of a Person that is a partnership or limited liability company, any general partner, managing member or manager of such Person, as applicable;
 - (D) in the case of any Person that is a registered broker or dealer that has been admitted to membership in a Controlled National Securities Exchange (an "Exchange Member"), any Person that is associated with the Exchange Member (as determined using the definition of "person associated with a member" as defined under Section 3(a)(21) of the Act);
 - (E) in the case of a Person that is a natural person and Exchange Member, any broker or dealer that is also an Exchange Member with which such Person is associated;
 - (F) in the case of a Person that is a natural person, any relative or spouse of such Person, or any relative of such spouse who has the same home as such Person or who is a director or officer of the

Corporation or any of its parents or subsidiaries; (G) in the case of a Person that is an executive officer (as defined under Rule 3b-7 under the Act) or a director of a company, corporation or similar entity, such company, corporation or entity, as applicable; and (H) in the case of a Person that is a general partner, managing member or manager of a partnership or limited liability company, such partnership or limited liability company, as applicable; and

- (iii) The term "beneficially owned", "own beneficially" or any derivative thereof shall have the meaning set forth in Rule 13d-3 under the Act.

(b) **Limitations.**

- (i) For so long as the Corporation shall control, directly or indirectly, a Controlled National Securities Exchange, except as provided in clauses (ii) (A) and (ii) (B) below:
 - (A) No Person, either alone or together with its Related Persons, may own, directly or indirectly, of record or beneficially, shares constituting more than forty percent (40%) of any class of capital stock of the Corporation;
 - (B) No Exchange Member, either alone or together with its Related Persons, may own, directly or indirectly, of record or beneficially, shares constituting more than twenty percent (20%) of any class of capital stock of the Corporation; and
 - (C) No Person, either alone or together with its Related Persons, at any time may, directly, indirectly or pursuant to any voting trust, agreement, plan or other arrangement, vote or cause the voting of shares of the capital stock of the Corporation or give any consent or proxy with respect to shares representing more than twenty percent (20%) of the voting power of the then issued and outstanding capital stock of the Corporation, nor may any Person, either alone or together with its Related Persons, enter into any agreement, plan or other arrangement with any other Person, either alone or together with its Related Persons, under circumstances that would result in the shares of capital stock of the Corporation that are subject to such agreement, plan or other arrangement not being voted on any matter or matters or any proxy relating thereto being withheld, where the effect of such agreement, plan or other arrangement would be to enable any Person, either alone or together with its Related Persons, to vote, possess the right to vote or cause the voting of shares of the capital stock of the Corporation which would

represent more than twenty percent (20%) of said voting power.

- (ii) Subject to clauses (iii) and (iv) below:
 - (A) The limitations in clause (i)(A) and (i)(C) above shall not apply in the case of any class of stock that does not have the right by its terms to vote in the election of members of the Board of Directors of the Corporation or on other matters that may require the approval of the holders of voting shares of the Corporation (other than matters affecting the rights, preferences or privileges of said class of stock); and
 - (B) The limitations in clauses (i)(A) and (i)(C) (except with respect to Exchange Members and their Related Persons) may be waived by the Board of Directors of the Corporation pursuant to a resolution duly adopted by the Board of Directors, if, in connection with the taking of such action, the Board of Directors adopts a resolution stating that it is the determination of such Board that such action will not impair the ability of the Controlled National Securities Exchange to carry out its functions and responsibilities as an "exchange" under the Act, and the rules and regulations promulgated thereunder; that it is otherwise in the best interests of the Corporation, its stockholders and the Controlled National Securities Exchange and that it will not impair the ability of the Commission to enforce the Act and the rules and regulations promulgated thereunder, and such resolution shall not be effective until it is filed with and approved by the Commission. In making the determinations referred to in the immediately preceding sentence, the Board of Directors may impose on the Person in question and its Related Persons such conditions and restrictions as it may in its sole discretion deem necessary, appropriate or desirable in furtherance of the objectives of the Act and the rules and regulations promulgated thereunder, and the governance of the Controlled National Securities Exchange.
- (iii) Notwithstanding clauses (ii)(A) and (ii)(B) above, in any case where a Person, either alone or together with its Related Persons, would own or vote more than any of the above percentage limitations upon consummation of any proposed sale, assignment or transfer of the Corporation's capital stock, such sale, assignment or transfer shall not become effective until the Board of Directors of the Corporation shall have determined, by resolution, that such Person and its Related Persons are not subject to any applicable "statutory

disqualification" (within the meaning of Section 3(a)(39) of the Act).

- (iv) Notwithstanding clauses (ii)(A) and (ii)(B) above, and without giving effect to the same, any Person that either alone or together with its Related Persons proposes to own, directly or indirectly, of record or beneficially, shares of the capital stock of the Corporation constituting more than forty percent (40%) of the outstanding shares of any class of capital stock of the Corporation, or to exercise voting rights, or grant any proxies or consents with respect to shares of the capital stock of the Corporation constituting more than twenty percent (20%) of the voting power of the then issued and outstanding shares of capital stock of the Corporation, shall have delivered to the Board of Directors of the Corporation a notice in writing, not less than forty-five (45) days (or any shorter period to which said Board shall expressly consent) before the proposed ownership of such shares, or the proposed exercise of said voting rights or the granting of said proxies or consents, of its intention to do so.

(c) **Required Notices.**

- (i) Any Person that, either alone or together with its Related Persons, owns, directly or indirectly (whether by acquisition or by a change in the number of shares outstanding), of record or beneficially five percent (5%) or more of the then outstanding shares of capital stock of the Corporation (excluding shares of any class of stock that does not have the right by its terms to vote generally in the election of members of the Board of Directors of the Corporation) shall, immediately upon acquiring knowledge of its ownership of five percent (5%) or more of the then outstanding shares of such stock, give the Board of Directors written notice of such ownership, which notice shall state: (A) such Person's full legal name; (B) such Person's title or status and the date on which such title or status was acquired; (C) such Person's (and its Related Person's) approximate ownership interest of the Corporation; and (D) whether such Person has the power, directly or indirectly, to direct the management or policies of the Corporation, whether through ownership of securities, by contract or otherwise.
- (ii) Each Person required to provide written notice pursuant to subparagraph (c)(i) of this Article Ninth shall update such notice promptly after any change in the contents of that notice; provided that no such updated notice shall be required to be provided to the Board of Directors (A) in the event of an increase or decrease in the ownership percentage so reported of less than one percent (1%) of the then outstanding shares of any class of capital stock (such

increase or decrease to be measured cumulatively from the amount shown on the last such notice), unless any increase or decrease of less than one percent (1%) results in such Person owning more than twenty percent (20%) or more than forty percent (40%) of the shares of any class of capital stock then outstanding (at a time when such Person previously owned less than such percentages) or such Person owning less than twenty percent (20%) or less than forty percent (40%) of the shares of any class of capital stock then outstanding (at a time when such Person previously owned more than such percentages); or (B) in the event the Corporation issues additional shares of capital stock (or securities convertible into capital stock) or takes any other action that dilutes the ownership of such Person, or acquires or redeems shares of outstanding capital stock or takes any other action that increases the ownership of such Person, in each case without any change in the number of shares held by such Person.

- (iii) The Board of Directors of the Corporation shall have the right to require any Person reasonably believed to be subject to and in violation of this Article Ninth to provide the Corporation complete information as to all shares of stock of the Corporation owned, directly or indirectly, of record or beneficially, by such Person and its Related Persons and as to any other factual matter relating to the applicability or effect of this Article Ninth as may reasonably be requested of such Person.

(d) **Effect of Purported Transfers and Voting in Violation of this Article.** If any stockholder purports to sell, transfer, assign or pledge to any Person, other than the Corporation, any shares of the Corporation that would violate the provisions of this Article Ninth, then the Corporation shall record on the books of the Corporation the transfer of only that number of shares that would not violate the provisions of this Article Ninth and shall treat the remaining shares as owned by the purported transferor, for all purposes, including without limitation, voting, payment of dividends and distributions with respect to such shares whether upon liquidation or otherwise. If any stockholder purports to vote, or to grant any proxy or enter into any agreement, plan or other arrangement relating to the voting of, shares that would violate the provisions of this Article Ninth, then the Corporation shall not honor such vote, proxy, agreement, plan or other arrangement to the extent that such provisions would be violated, and any shares subject to that arrangement shall not be entitled to be voted to the extent of such violation.

(e) **Right to Redeem Shares Purportedly Transferred or Owned in Violation of this Article.** If any stockholder purports to sell, transfer, assign, pledge or own any shares of the Corporation in violation of the provisions of this Article Ninth, then the Corporation shall have the right to, and shall promptly after confirming such violation and to the extent funds are legally available, redeem the shares sold, transferred, assigned, pledged, or owned in violation of the provisions of this Article Ninth for a price per share equal to the par value of those shares. The number of shares to be redeemed by the Corporation pursuant to the foregoing provision shall

be calculated by the Corporation after taking into account that such redeemed shares shall become treasury shares and shall no longer be deemed to be outstanding. Written notice shall be given by the Secretary of the Corporation to the holder or holders of record with respect to the redeemable shares at the address of the holder or holders of record appearing on the books of the Corporation, which notice shall specify a date for redemption of the shares that shall be not less than ten (10) days nor more than thirty (30) days from the date of such notice. Any shares which have been so called for redemption shall not be deemed outstanding shares for the purpose of voting or determining the total number of shares entitled to vote on any matter on and after the date on which written notice of redemption has been given to the holder or holders of those shares if a sum sufficient to redeem such shares shall have been irrevocably deposited or set aside to pay the redemption price to the holder or holders of the shares upon surrender of certificates for those shares. From and after the redemption date (unless the Corporation shall default in providing funds for the payment of the redemption price) the shares of redeemed stock which have been redeemed by the Corporation as aforesaid shall become treasury shares and shall no longer be deemed to be outstanding, and all rights of the holder of such redeemed stock as a stockholder of the Corporation (except the right to receive from the Corporation the redemption price against delivery to the Corporation of evidence of ownership of such shares) shall cease. Written notice shall be given by the Secretary of the Corporation to all holders of record appearing on the books of the Corporation of any redemption by the Corporation (including, without limitation, a redemption pursuant to this clause (e)) (in each case, a "Redemption") not more than ten (10) days after consummation of the Redemption, which notice shall specify the number of shares outstanding after the Redemption of each class of the Corporation's capital stock. In the event that any redemption has resulted in any additional stockholder owning such number of shares of the Corporation that is in violation of the provisions of this Article Ninth, the Corporation shall have the right to and shall promptly after confirming such violation, redeem such shares pursuant to the provisions of this Article Ninth.

TENTH:

(a) **Indemnification.** The Corporation shall provide indemnification for members of its Board of Directors, members of committees of the Board of Directors and of other committees of the Corporation, and its executive officers, and may provide indemnification for its other officers and its agents and employees, and those serving another corporation, partnership, joint venture, trust or other enterprise at the request of the Corporation, in each case to the maximum extent permitted by Delaware law; provided, however, that the Corporation may limit the extent of such indemnification by individual contracts with its directors and executive officers; and, provided, further, that the Corporation shall not be required to indemnify any person in connection with any proceeding (or part thereof) initiated by such person or any proceeding by such person against the Corporation or its directors, officers, employees or other agents unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the Board of Directors of the Corporation or (iii) such indemnification is provided by the Corporation, in its sole discretion, pursuant to the powers vested in the Corporation under the General Corporation Law of Delaware.

(b) **Limitation of Liability.** To the fullest extent not prohibited by the General Corporation Law of the State of Delaware, as it exists on the date this Amended and Restated

Certificate of Incorporation is adopted or as such law may later be amended, no director of the Corporation shall be liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director. No amendment to or repeal of this Article shall adversely affect any right or protection of a director of the Corporation that exists at the time of such amendment or repeal with respect to any actions taken, or inactions, prior thereto.